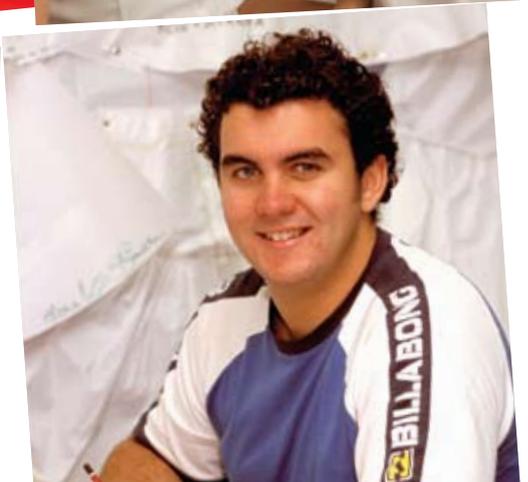
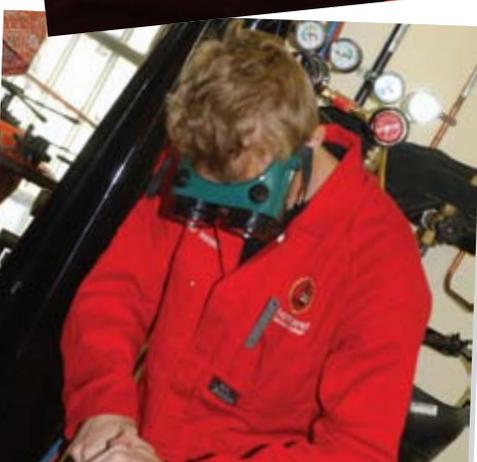


Effective Strategies to Increase School Completion Report

Every
child,
every
opportunity



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Effective Strategies to Increase School Completion Report

Report to the Victorian Department of Education
and Early Childhood Development

by Associate Professor Stephen Lamb and Dr Suzanne Rice

Centre for Post-compulsory Education and Lifelong Learning
The University of Melbourne

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Lakes Entrance Secondary College
Lalor North Secondary College
Lalor Secondary College
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We would also like to express our thanks to, and acknowledge the expert skills of, the team of researchers who visited the schools: Chris Kotur, Tim Jones, Sue Helme, Teresa Angelico, Sandra McAuliffe and Anne Walstab.

Foreword

The *Effective Strategies to Increase School Completion Report* outlines successful intervention strategies that work to improve student engagement and increase rates of school completion. This Report was commissioned by the Youth Transitions Division, Office for Policy, Research & Innovation, and undertaken by Associate Professor Stephen Lamb and Dr Suzanne Rice from the Centre for Post Compulsory Education and Lifelong Learning at the University of Melbourne.

The research identified effective strategies that are being implemented in a number of Victorian government secondary schools and that were identified in national and international literature. The *Effective Strategies to Increase School Completion Report* describes a range of strategies that are most effective at re-engaging and supporting students at risk of early school leaving that can lead to increased rates of school completion.

Associate Professor Stephen Lamb and Dr Suzanne Rice from the University of Melbourne also developed a *Guide to Help Schools Increase School Completion* that complements the Report. The Guide explores how schools can plan and implement the strategies to improve student engagement and increase student retention, and how to put these effective strategies to work in their school and community.

Students who do not complete Year 12 or its equivalent are more likely to become unemployed, stay unemployed for longer, have lower earnings, and over the course of their lives, accumulate less wealth, a problem that will only increase with time as employers seek a more highly skilled workforce. The connection is simple - retention, engagement and higher levels of education opens up broader opportunities that lead to better personal, social and economic outcomes.

Both the Report and the Guide support the *Blueprint for Education and Early Childhood Development* which highlights the importance of affording every child every opportunity to succeed in education, regardless of their location or socio economic circumstances. The provision of this information will assist schools in making this important goal a reality.



A handwritten signature in black ink that reads "Jane R. Suggitt".

Dr Dahle Suggitt

Deputy Secretary
Office for Policy Research and Innovation

Executive Summary

Young people today need higher levels of education and training than previous generations if they are to make successful transitions from school to work.



In recognition of this need, the Victorian government has set a policy target to have 90 per cent of young people completing Year 12 or its equivalent by the year 2010. Disengagement from school and early leaving tend to be concentrated among particular groups of young people. These include students from indigenous backgrounds, those with integration needs, low achievers, those from low socio-economic status (SES) backgrounds, children in families under stress, and young people living in neighbourhoods of high poverty or in remote locations. Relatively little Australian research exists on the strategies schools can use to improve student engagement and increase participation in post-compulsory education for children in such at risk categories. This project set out to identify effective intervention strategies that are known to work to improve student engagement and increase completion of school for at risk students.

An extensive review of the national and international literature on school completion and early leaving was conducted to identify strategies that address key risk factors for early leaving. Included in the review was an evaluation of the quality of the evidence used to measure the effectiveness of intervention strategies. The aim was to identify the strategies that have been shown empirically to lift engagement and completion. In addition to the review, an intensive study was conducted in 25 government secondary schools in Victoria that had better-than-

expected student completion rates, or that were recognised as working innovatively to engage students. Principals, members of the leadership group and welfare staff at the schools were interviewed to identify the strategies and factors staff saw as vital to improving engagement and completion.

From the literature review and the survey of schools what emerged as central to improving school engagement and completion for at risk students was a series of targeted interventions and programs underpinned by a supportive school culture or climate. The elements of school culture central to maximising student engagement and retention included a shared vision across the school community, high expectations of staff and students, flexibility and responsiveness to individual student needs, a commitment to success for all students, and a drive for continuous improvement.

The targeted initiatives include student-focused strategies such as:

- mentoring,
- early and more intensive pathways and careers planning,
- careers guidance managed by appropriately qualified staff,
- fine-grained co-ordination of welfare needs,
- family outreach,
- programs to improve students' social skills,
- tutoring and peer tutoring,

- targeted financial support,
- case management, and
- targeted assistance for skill development among low achievers.

They also include school-wide strategies:

- familial-based forms of organisation such as mini-schools,
- team-based approaches to teaching, learning and pastoral care,
- early intervention to support literacy and numeracy skill growth,
- project-based and applied approaches to learning,
- pathways planning and quality careers guidance and counselling, such as outlined in the *MIPS Good Practice Framework*,
- smaller class sizes,
- strategic use of teachers and teaching resources,
- initiatives to improve connections with parents,
- priority professional development,
- broad curriculum provision with strong VET options, and
- high expectations on attendance and behaviour.

The schools with the greatest success in improving student retention combine a range of these strategies, working to develop whole-of-staff commitment to engaging students, and constantly refining approaches as student and parent needs shift.

The research found that there were several common strands running through the most effective programs and strategies. The most effective programs appear to do the following:

- foster connectedness between students, parents, the school and the community,
- increase the trust placed in students,
- provide tasks for students with immediate, tangible benefits,
- make spaces within schools and curricula for diverse student needs,
- address poor achievement, and
- address students' practical personal obstacles to staying at school.

In addition, the schools most successful at increasing school completion adopted the following principles, which are also supported by the international literature:

- *Early intervention is best:* Schools that had increased student engagement and retention identified student problems such as weak achievement or welfare needs at an early stage, and were proactive in addressing them.
- *Schools need to ensure interventions are sustained:* Schools that provided program continuity and long-term supports for students were most successful in addressing achievement and engagement issues. Research participants stressed the importance of allowing time and funding for initiatives to be embedded within the school culture.

- *Schools need to adopt multifaceted approaches:* It is usually the case that no single strategy works alone to increase student engagement and retention. Rather, successful schools used a range of strategies to address a variety of student needs.
- *Context sensitivity is essential:* Numerous research participants noted the importance of selecting and adjusting strategies according to the needs of the local students and parents.
- *Supportive school culture greatly improves effectiveness:* The schools most successful in engaging and retaining students had an integrated approach, underpinned by a well-articulated philosophy that drove all aspects of provision and a culture of continuous improvement.

The report provides a number of recommendations to help support implementation of Effective Strategies across Victorian government secondary schools. The recommendations are directed more at a system level than at individual schools. The main issue is how schools can be supported in their efforts to identify appropriate strategies and then to implement them, given their geographic location, size, student population and community context.

1. Introduction

This report sets out the findings from a project undertaken to identify effective intervention strategies that schools can use to help improve student engagement and increase rates of school completion for students at risk of early leaving.



Effective strategies were identified through two means: (1) a literature review of school initiatives found to have reduced rates of early leaving, and (2) a survey of schools in Victoria that serve high proportions of at risk students and either have achieved much higher than expected completion rates, or have been identified as particularly innovative in improving levels of student engagement.

The focus in the project is on school strategies or interventions that are effective for students who are at risk of disengagement or early leaving. No attention is given to strategies for students who have already left school and the interventions that work to help them re-engage in education. Further work is needed to identify programs and strategies for students who have already dropped out of school. It is important to note that interventions to address the needs of at risk students are only one component of a holistic approach to quality provision. Schools also need to consider quality of teaching and learning which are important influences on school completion rates. However, the report does not attempt to document information on effective teaching practices, rather the aim is to identify successful programs and interventions schools can use to address the needs of students who traditionally have tended to drop out of school before completing a senior secondary certificate.

The report is divided into several sections. The first section provides a brief background to the project outlining some of the issues around early leaving and its importance and some recent developments. Following this is an outline of how effective strategies were identified and how information about them was collected. Section 3 presents a framework for thinking about effective strategies and how to group them. Section 4 provides an outline of effective strategies identified through the project and discusses their likely impact. Section 5 presents the various effective strategies, providing details on each of the main types in turn, and also indicates which strategies are likely to be more effective with particular groups of at risk students. Sections 6 to 9 discuss aspects of the programs and what makes them successful in schools, how to measure potential impact, and some of the challenges that schools face in working to increase student engagement and retention. Section 10 gives an estimate of the costs associated with implementing a range of interventions and intervention models, and the final section provides recommendations for policy and practice.

1.1 Background

Failure to complete school or gain equivalent qualifications carries serious consequences for young people.

Not completing school and failing to gain equivalent education and training qualifications is associated with poorer labour market outcomes and greater insecurity in building careers. Consistently, research in Australia and overseas shows that early leavers are more likely to become unemployed, stay unemployed for longer, have lower earnings, and over the life-course accumulate less wealth (for example, see Rumberger & Lamb, 2003; OECD, 2001; Barro, 1997). They also more often experience poorer physical and mental health, higher rates of crime and less often engage in active citizenship (Owens, 2004; Rumberger, 1987). In addition to the costs for individuals, there are also social costs associated with increased welfare needs (Owens, 2004).

Addressing the problem of disengagement and early leaving presents a major test for schools and school systems. The key challenge to encouraging more young people to remain at school is finding ways to address the needs of the critical groups of young people who remain at risk of early leaving. Young people who leave school before obtaining an upper secondary qualification tend to come

from disadvantaged social backgrounds, they tend more often to have become disengaged from school, are less motivated scholastically, and more often experience personal difficulties and behavioural issues that place them at risk (for example, see Lamb et al., 2004; Rumberger, 1987; Audas and Willms, 2001; European Commission, 2005). They also tend to have histories of school failure and low academic achievement during the compulsory years.

In recognition of these issues, the Victorian government has set a policy target to have 90 per cent of young people completing Year 12 or its equivalent by the year 2010. If this goal is to be achieved, it is essential that schools develop, implement and enhance strategies that effectively address the factors that lead students to disengage from school and drop out. This will be far more difficult in some schools than in others. That is because early leaving and the groups most affected by it tend to be spread unevenly across geographical areas and schools. Some schools have very high concentrations of disadvantaged students — those most at risk of early leaving. Addressing the problem of disengagement and early leaving will fall heavily on these schools, because families in disadvantaged settings are most dependent on the quality of schools to promote success for their children.

Relatively little Australian research exists on the strategies schools can use to improve student engagement and increase participation in post-compulsory education for children in such at risk categories. However, the past decade has seen the implementation of a number of retention initiatives, both in Australia and elsewhere. In Victoria, for example, there has been the implementation of the Managed Individual Pathways (MIPs) program and the recent development of the Student Mapping Tool to help schools identify students at risk of disengagement and early leaving. Also in recent years a number of research projects have focused on the factors influencing student retention, including factors over which schools have some control (see, for example, Lamb et al., 2004).

In order to help the students most at risk, schools need to be able to draw on this body of work to identify the best means of engaging and supporting students. This project set out to identify effective school intervention strategies that are known to work to improve student engagement and retention for at risk students. It aims to provide an analysis and summary from local, national and international sources on the most effective means secondary schools have available to help engage at risk students so that they can gain most from school.

2. Method for identifying effective strategies

The aim of the project was to identify successful programs and strategies or interventions that schools can use to target the needs and improve the outcomes of the students most at risk of early leaving.

To do this, two key tasks were undertaken. The first involved an extensive literature review to discover what national and international research identifies as the most successful initiatives to improve student engagement in school and reduce early leaving. The focus of the review was on identifying programs for which there was clear documented empirical evidence of improvements in student engagement and reductions in early leaving. There is a very large number of dropout prevention programs and initiatives reported in the literature. However, only a much smaller number have valid empirical assessments that measure and report actual improvements in engagement and school completion. It is only the initiatives that have been shown to lead to improvements that are reported here. The review identified a number of effective programs and strategies from around the world, and a list of strategies that could be implemented by schools was developed.

It was also important to discover successful strategies or initiatives local Victorian schools have developed and implemented to increase student engagement and retention. The second key task was to survey Victorian government schools on interventions or initiatives that they have found to be effective in improving outcomes for at risk students. The task was undertaken in two stages. In the first stage, an e-mail was sent from the Department of Education and Early Childhood Development (DEECD) to all government secondary schools receiving supplementary Student Resource Package (SRP) funding to assist with disadvantaged students. Approximately 50 per cent of all secondary schools receive some form of Student Family Occupation (SFO) funding to help target the needs of disadvantaged students. The schools were asked to provide information on the sorts of programs and strategies they had in place to assist at risk students, particularly those they had found successful in improving outcomes.

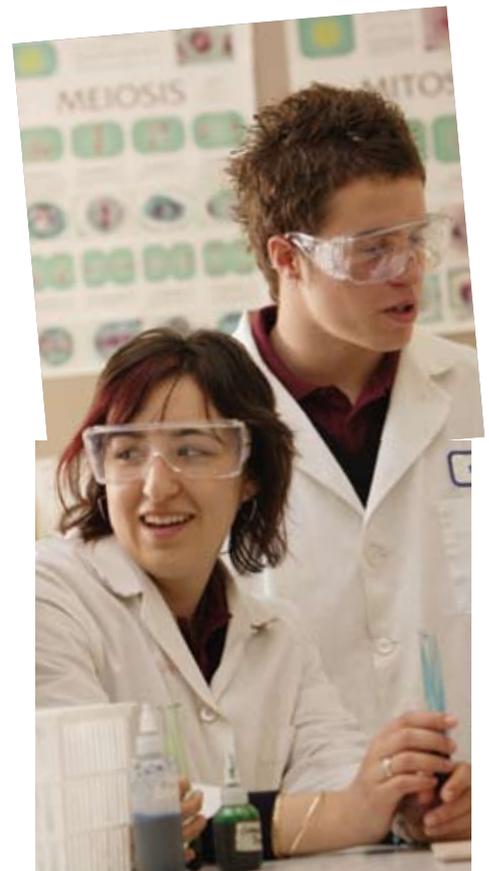
The second stage involved intensive interviews with a group of schools that had proven very successful in reducing early leaving despite having large numbers of disadvantaged students. On-site interviews were conducted with principals, senior management team members and welfare staff at 25 country and metropolitan secondary schools. The schools were targeted for one of two reasons:

1. The school had much higher-than-expected student retention rates, taking into account the socio-economic student profile, location, and size of the school measured through an appropriate 'value-adding' regression procedure. The selected schools were those with the best results (more than a standard deviation above predicted rates) among the schools with the highest densities of disadvantaged students measured on the SFO (SES-intake) scale (12 schools); or

2. The school was identified by Regional DEECD staff as having been particularly innovative or creative in developing initiatives to improve student engagement and retention for at risk students (13 schools).

The interviews were used to collect information on successful innovations, initiatives or interventions that schools had put in place and which had worked to improve student outcomes.

Information collected from both stages of work — the extensive literature review and the intensive school surveys — was used to compile a list of effective programs and strategies that schools can use to help improve student engagement in school and reduce early leaving. The list was presented in a Discussion Paper, and a series of workshops were held to discuss the strategies outlined in the paper and their suitability for implementation across a range of school settings.



3. Framework for grouping interventions

Research evidence and social theory strongly suggest that dropping out of school is the cumulative result of many factors that reach back a considerable distance into a student's life — predictive factors can emerge very early on in primary school and even before.

Recent thinking about the process of disengagement and early leaving points to the processes beginning early. Some have described understanding of the process as needing a 'life course perspective', which takes the focus away from the decision to leave school early to major precursors — academic achievement, behaviour, and engagement (see Audas and Willms, 2001). They suggest that the very final decision to dropout of school is much less important to study than the gradual withdrawal from school that most early leavers tend to exhibit long before the actual decision to leave. It points to a need to understand the origins and development of low achievement, risk-taking behaviour, and disengagement from school that tends to occur at different phases of a child's schooling, sometimes evident quite early. It is then possible to identify ways of being able to intervene, address the issues and produce change.

What the research and thinking does suggest, based on this view, is that schools can intervene and bring about change. While the evidence shows that

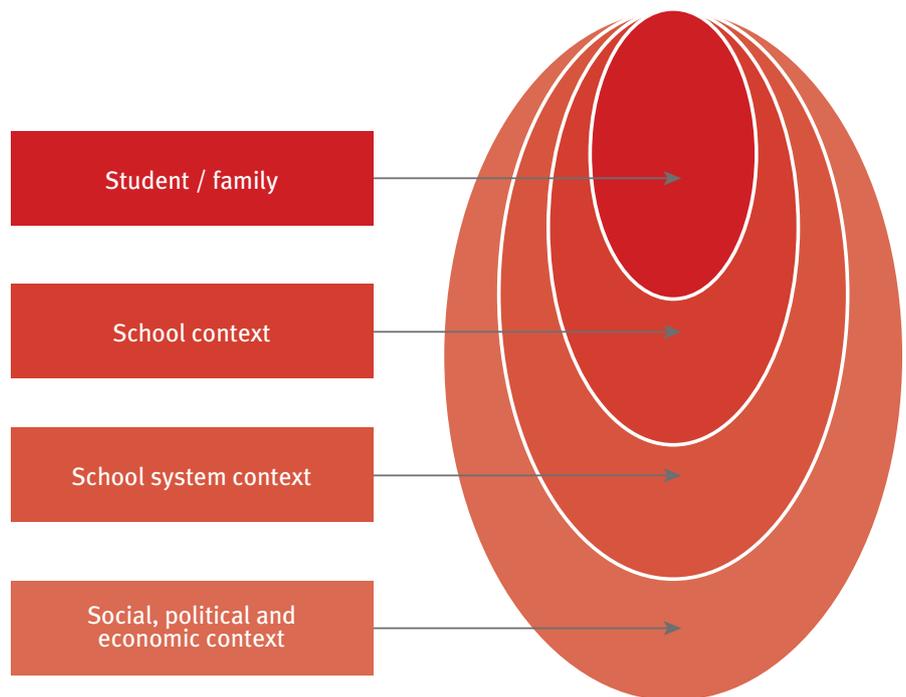
children from lower socio-economic backgrounds are much more likely to become early school leavers, recent literature has also emphasised that the context in which a child develops has important effects beyond family background. Schools can play a role in reducing the effects of social background and improving outcomes for at risk students. This can be achieved through targeted interventions and strategies.

Life-course theories point to the interrelated effects of various levels of influence, of context, including the family, school, system, and broader economic and political settings. Figure 1 presents, in diagram form, some of the levels or layers of context shaping students' school experiences. The diagram is a simple, one dimensional, representation of a complex set of interrelated social contexts. However, it serves the purpose of displaying some of the areas or domains of influence on student experiences and decisions. Intervention to help improve outcomes for at risk students can occur within or across the various levels of context.

This project is particularly interested in the initiatives that schools can implement to improve engagement and retention for students at risk of early leaving. This means that the initiatives reported in the paper will relate mainly to the school context and the school policies targeting students and their families. Initiatives implemented at a system level or in a wider community and socio-political-economic context will not be discussed.

Strategies covered in this paper therefore tend to fall into one of two categories: strategies affecting the school context and at a school-wide level, and strategies targeting individual student need, although it should be stressed that the boundaries between the two categories are not always clear-cut. Some strategies, for example, may create school-wide change but may also be tailored to individual student requirements.

Figure 1 Four domains of influence in addressing student need



The distinction between school-wide and student-focused interventions will be used in the following sections to categorise the various strategies identified in this project to help improve student engagement and reduce early leaving.

4. Outline of effective strategies

The international literature review and the survey of Victorian schools identified a number of strategies to increase student engagement and reduce early school leaving.

The strategies are sometimes separate or stand-alone interventions, and sometimes elements that are part of broader programs. Either way, they are listed because there was good research evidence suggesting that they reduce rates of early leaving. The main strategies are summarised in Table 1. The table shows each strategy against the number of Victorian schools in which the strategy was observed. Also presented are examples of the national and international research that identify the strategies as effective, and programs which employ them. It is important to note that where strategies have been observed in the Victorian sample schools, a smaller number does not mean less effectiveness or provide a means for ranking. Some strategies may have only been evident in one or two schools, but have been the most effective in promoting better outcomes. Conversely, all schools may employ some strategies — such as MIPS — but do so with varying levels of effectiveness. Information on the number of schools is presented merely to show in how many of the Victorian sample schools visited for this project the strategies had been implemented.

A full list providing details of programs and descriptions of the research evidence is provided in Tables 1A and 1B in the Appendix. Table 1A presents school-wide initiatives, while Table 1B presents student-focused initiatives. Further information on specific successful integrated programs for which there is strong empirical evidence of success is presented in Table 2A.

The interventions are grouped into three areas:

- (1) Supportive school culture (school commitment),
- (2) School-wide strategies (school-level initiatives), and
- (3) Student-focused strategies (initiatives addressing needs of specific groups of students or individuals).

The first two areas relate to the school context, to interventions or approaches that are school-wide. The first area is about the broad school approach to students, to teaching and learning and addressing the needs of students at risk. It is about management, leadership, school culture and the commitment of the school to improvement for all. It is the commitment of the school at this level that enhances the success of any specific or targeted interventions to produce improvements.

The second area is about specific strategies or initiatives that are adopted school-wide, affecting all students, but which help improve student engagement and reduce rates of early leaving.

The third area (student-focused strategies) relates to interventions that target specific groups of students. These are the programs that attempt to directly address the individual or group needs of at risk students, rather than the whole student body.

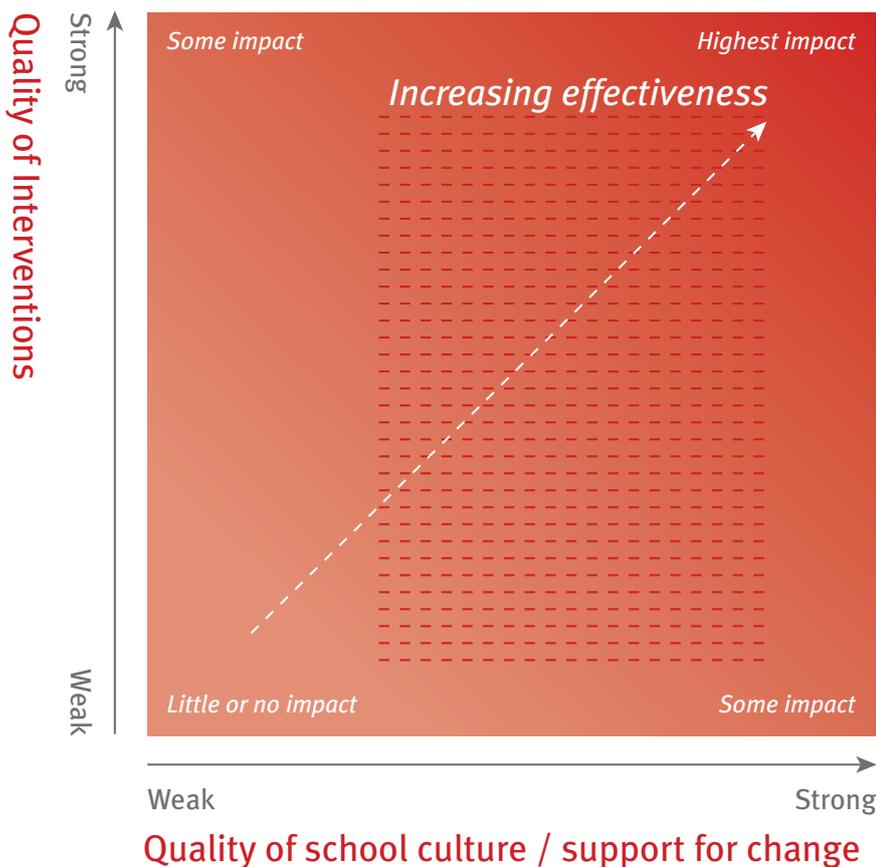
Table 1 Successful interventions for improving engagement and reducing early school leaving

Strategy	Victorian sample schools (N=25) Observed in:	National and international literature review Identified in:
Supportive school culture (School commitment)		
Commitment to continuous improvement	9 schools	Research (eg Socias et al. 2007; Zepeda, 2004; Brown, 2004; Fullan, 1991). Programs: e.g <i>Check & Connect</i>
Commitment to success for all	12 schools	Research (eg Socias et al., 2007; Rumberger, 2008).
Flexibility and responsiveness to individual need	10 schools	Research (Zepeda, 2004; Brown, 2004; Fullan, 1991). Programs: eg <i>Check & Connect, Achievement for Latinos through Academic Success.</i>
High expectations	6 schools	Research (eg Socias, 2007; Zepeda, 2004; Brown, 2004; Fullan, 1991; Rumberger, 2008).
Encouraging student responsibility and autonomy	11 schools	Research (eg Zepeda, 2004; Brown, 2004; Fullan, 1991).
Shared vision	10 schools	Research (eg Zepeda, 2004; Brown, 2004; Fullan, 1991).
School-wide strategies (School-level approaches)		
Broad curriculum provision in the senior years	20 schools	Research (Russell et al., 2005; Lamb et al., 2004).
Offering quality Vocational Education and Training (VET) options	14 schools	Research (Lamb, 2008; Bishop & Mane, 2004; Plank et al., 2005) Programs: <i>Career Academies, STAR, Learning to work, Specialist High Skills Major.</i>
Providing programs that are challenging and stimulating		Research (eg Bryk & Thum, 1989; National Research Council, 2004).
Early intervention to support literacy and numeracy skill growth	6 schools	Research (eg Dickinson & Neuman, 2006; Field et al., 2007).
Programs to counter low achievement	13 schools	Research (eg Balfanz, Legters & Jordan, 2004; Field et al., 2007; Lamb et al., 2004; Rumberger, 2004). Programs: eg <i>Transition to Advanced Maths</i>
Pathways planning and quality careers guidance and counselling	16 schools	Research (eg Asquith Group, 2005; Morris, 2000). Programs: eg <i>MIPS, Careers Educn.</i>
Strategic use of teachers and teaching resources	3 schools	Research (eg Lamb, 2007; Neild & Farley-Ripple, 2008).
Smaller class sizes	3 schools	Research (eg Finn, 2005; Pritchard, 1999) Programs: eg <i>Student Teacher Achievement Ratio</i>
Mini-school or school-within-a-school organisation	11 schools	Research: (eg Kerr & Legters, 2004). Programs: eg <i>Career Academies, Talent Development Middle Schools/High schools, STEP</i>
Team-based approaches to teaching, learning and pastoral care	4 schools	Research (eg Herlihy & Kemple, 2004). Programs: <i>Talent Development Middle Schools/High schools, STEP</i>

Strategy	Victorian sample schools (N=25) Observed in:	National and international literature review Identified in:
Priority professional development	10 schools	Research (eg Wenglinsky, 2000; Quint et al., 2005). Programs: eg <i>First Things First</i> .
Community service	9 schools	Research (eg Eccles & Templeton, 2002) Programs: eg <i>Teen Outreach Program</i> , <i>Quantum Opportunities Program</i> .
Cross-sectoral initiatives	14 schools	Programs: eg <i>Student Success Lighthouse Projects (Ontario)</i> ; <i>Learning to Work (New York)</i> ; <i>Targeted Youth Support Pathfinders (UK)</i> ; <i>Connexions (UK)</i> .
Attendance policies and programs	10 schools	Programs: Check & Connect; Project Respect.
Initiatives to improve connections with parents	10 schools	Research (eg Jeynes, 2007). Programs: eg <i>Achievement for Latinos through Academic Success</i>
Conflict resolution, mediation or problem-solving programs	3 schools	Research (eg Fox et al., 2003). Programs: eg <i>Restorative Justice</i> ; <i>Olweus Bullying Prevention Program</i> ; <i>The Incredible Years</i> ;
Student-focused strategies (Addressing individual student needs)		
Student case management	25 schools	Research (eg Johnson, 1996; Eccles & Templeton, 2002; WWC, 2007). Programs: eg MIPS; <i>I have a Dream</i> ; <i>Big Brother Big Sister</i> ; <i>Sponsor a Child</i> ; <i>Check & Connect</i> ; <i>Twelve Together</i>
Mentoring	8 schools	Programs: eg <i>Big Brother Big Sister</i>
Welfare support	13 schools	Research (eg Belfield & Levin, 2007; WWC, 2007). Programs: eg <i>Achievement for Latinos through Academic Success</i>
Targeted assistance for skill development among low achievers	4 schools	Research (eg Gandara et al., 1998; Dynarski et al., 1998; Eccles & Templeton, 2002). Programs: eg <i>Helping One Student to Succeed</i> ; <i>ALAS</i> ; <i>Twelve Together</i> ; <i>Teen Outreach Program</i> ; <i>Career Academies</i>
Tutoring and peer tutoring	4 schools	Research (eg Eccles & Templeton, 2002) Programs: eg <i>Valued Youth Programs</i>
Supplementary or out-of-school-time programs	7 schools	Programs: eg <i>Homework Clubs</i> ; <i>Extended Service Schools</i> ; <i>After-school & Summer Programs</i> .
Pathways planning for at risk students	4 schools	Research (eg Morris, 2000). Programs: eg MIPS; <i>Careers Education</i>
Targeted financial support	5 schools	Research (eg Smith Family, 2000). Programs: eg <i>Learning for Life</i> ; <i>I have a Dream</i> ; <i>LEAP</i> .
Project-based learning for disengaged students	9 schools	Research (eg Eames et al., 2006). Programs: eg <i>Creative Partnerships</i> ; <i>Hands on Learning</i> ; <i>Schools Community Water Resources Project</i> .

It was clear from both the research literature and the field work in schools carried out for this project that schools are most effective in addressing issues of student engagement and retention when all three areas are addressed: a strong supportive school culture with a commitment to improvement, school-wide strategies addressing quality of provision, and student-focused strategies focusing on individual needs. This relationship is outlined in Figure 2 which shows that the highest impact is likely to occur in schools that have both a strong culture with commitment to improvement for at risk students and high quality intervention programs or strategies.

Figure 2 Interactions between school culture, quality of interventions and effectiveness in increasing school completion



However, even in schools which have not yet established a culture or atmosphere that supports improvement it is still better to implement quality programs and strategies to address student need than not, as this is likely to have some impact. A productive and dynamic school culture will maximise effectiveness, but even in schools where this is not as evident the implementation of appropriate strategies should still be undertaken and is likely to improve retention.

Where school culture and the support for change is weak and there are few interventions in place to assist at risk students, there is likely to be little or no change to student engagement and retention. Where a school has implemented high quality programs or interventions addressing the needs of at risk students, even if support for change or school culture is weak, it is likely to have some impact on engagement and retention. Ideally, a strong school-wide commitment to improving student outcomes and school offerings will combine with both school-wide strategies and student-focused strategies to provide at risk students with the best possible chance of remaining in education.

It is now important to consider in more detail the various interventions that have been shown to work in reducing rates of early leaving.

5. Effective strategies: what works

This section presents the various strategies that have shown to be effective in having a positive impact on student engagement and raising levels of school completion.

Chapter 5 begins by looking at the need for schools to create a culture that supports engagement and completion. The theory and research literature on differential attainment supports some general points about the overall quality of a school's internal culture or environment and key features that sustain this. Specific strategies to improve engagement and completion for at risk students are then presented. The first set is of school-wide strategies or interventions (those affecting all students), but which help improve student engagement and reduce rates of early leaving, particularly important in settings with high concentrations of disadvantaged students. The second set lists the interventions that target specific groups of at risk students with high-level individual needs.

5.1 Supportive school culture

Interventions and strategies addressing need do not exist in a vacuum, and the quality of school culture plays a critical part in engaging and retaining students. A study by Socias et al. (2007) for the California Dropout Research Project found that schools with significantly better-than-predicted school completion rates, while nominating various interventions as being vital to their success, also stressed the development of a supportive school culture that fostered connections with students, parents and the community, and the creation of a school climate of high expectations and accountability. Croninger and Lee (2001) report that the degree of teacher caring and interaction with students (reported by both students and teachers) has a significant impact on dropout rates, and that the impact is strongest for at risk students, while Kennelly and Monrad (2007, p.11) note that, "schools successful in dealing with dropout address overall school climate in order to facilitate student engagement".

Likewise, in a review of effective secondary schools in the US, Lee et al. (1993) found evidence that schools with a common sense of purpose and a strong communal organisation (involving collegial relationships among staff and positive adult-student relationships) are effective in promoting a range of academic and social outcomes reflecting student engagement and commitment.

How schools create such supportive environments — a supportive school culture — remains a matter of debate. There are no universal rules or formulas that can be identified as the sole route to establishing a quality culture or atmosphere that produces strong positive student engagement and high levels of school completion, particularly in schools that have high proportions of at risk students. However, there are factors that researchers and school systems point to when describing quality schools and the features of the schools that have improved in effectiveness (see, for example, Zepeda, 2004; Brown, 2004; Fullan, 1991). Such features include:

- *Commitment to success for all:* building a shared view that all students can succeed with on-going commitment to identifying the most effective teaching and learning strategies to raise the achievement of at risk students.
- *Flexibility and responsiveness to individual need:* capacity to respond to varying needs which in addition to welfare and academic might include social, personal and emotional needs.
- *High expectations:* research findings point to the key role played by aspirations and the need to create a climate of achievement through effective leadership and a high level of teacher commitment and expectations for student learning.
- *Shared vision:* building a consensus around the aims and values of the school and developing a sense of community with a shared purpose.
- *Focus on continuous improvement:* continuing to reflect on and monitor the impact of changes and encourage innovation for improvement as well as refine and adjust approaches as student and parent needs shift.
- *Climate of challenging and stimulating teaching:* ensuring that programs engage learners, by offering tasks that are challenging and stimulating, that involve opportunities for shared learning, that are satisfying as learning experiences, and that have clear and demonstrable benefits beyond school.
- *Strong and fair disciplinary climate:* research on school effectiveness and engagement points to the need for creating a safe school disciplinary climate with clear and fair rules (Rumberger & Thomas, 2000; Wehlage & Rutter, 1986; Willms, 2003).
- *Encouraging student responsibility and autonomy:* building an ethos of students taking responsibility for their own learning and behaviour so that learners accept the idea that their own efforts are important for progress.

These elements were prominent in the schools surveyed for the current project. School A provides an example.

Case study: School A – The importance of creating a supportive school culture

School A is located in an industrial area of Melbourne with a large number of students from immigrant families, particularly refugees. Its size (450 students) limits its capacity in terms of curriculum breadth and additional programs, but retention rates are good and student and staff morale is high.

At the centre of the school's success is a focus on relationships between staff and students. Building positive relationships is identified as a priority in the school charter, and the principal stipulates that, as part of this, all staff members must be committed to at

least one extra-curricular program, and complete professional development on relationship enhancement. School A has organised teachers into teams focused on cohorts of students to help build relationships. The school has also introduced a separate Year 9 program with its own learning site, a more integrated curriculum, and a small group of teachers responsible for pastoral care and teaching.

The principal stated that most of the initiatives at the school were broad-based, rather than focused on at risk students. She commented, "It's not

about targeting specific programs to keep high retention, that's not the main consideration. High retention is a by-product of good overall organisation and provision as well as good school programs."

Strategies used:

Mini-schools, more time with fewer teachers, reduced class sizes, broad provision, generic work/communication skills programs, community service elements, co-curricular provision, focus on professional development, project-based learning, case management.

In interviews conducted in other Victorian government schools, many of the schools with higher-than-expected retention rates emphasised a culture of continuous improvement, with a school-wide vision and a commitment to the belief that all students can succeed. High expectations were also noted, and the school's commitment to success for all students was targeted through flexible and responsive program arrangements and a responsiveness to student needs. The principal of one school with many disadvantaged students and yet very high retention noted in reflection on the need to promote success for all, "I tell my staff, 'You're a teacher to make things better for the kids' — for all kids — that's been central [to our success]."

5.2 School-wide strategies

All of the strategies listed in Table 1 are components of at least one program or initiative for which there is empirical evidence of improvements in engagement and completion. They were also present in one form or another in the Victorian schools surveyed as part of our study. While all of the initiatives have some potential to affect student engagement and school completion, this discussion will focus on those that appeared to be most effective.

1. Broad curriculum provision in the senior years is identified in the research literature, and in the schools visited, as important to improving engagement and retention. Providing a curriculum that is broad (Russell et al., 2005), diverse and flexible (Lamb et al., 2004), that can accommodate a wide range of student interests and skill levels is important. Many of the Victorian schools participating in the study had broad provision including a range of VET and VCAL courses, and identified these as playing an important role in retaining at risk students. Many participants also emphasized not just the provision of a broad range of subjects, but the extent to which students were able to make choices: in one participating school with high retention rates, the only core subjects at Year 10 were maths and English — all other subjects were electives.

2. Offering quality Vocational Education and Training (VET) options is associated with stronger rates of completion (see for example, Bishop and Mane, 2004; Lamb, 2008; Lamb, Long & Malley, 1998; Castellano et al., 2003). International comparisons of school completion and early leaving have found that offering students VET in the senior school years tends to increase school attendance and completion and improve the labor market outcomes of school completers (Bishop and Mane, 2004; Lamb, 2008). VET has been found to have a significant impact on retaining students at risk of early leaving in Australia (Lamb and Vickers, 2006).

3. Programs that are challenging and stimulating are also vital to provide. Offering a range of alternatives and a broad curriculum does not mean that schools should offer programs that do not 'challenge' students. Students disengage in schools when there are low expectations (Bryk & Thum, 1989). Programs, even in applied areas, need to be challenging and stimulating because disengagement and early leaving occurs more often in schools where this is not the case (Field et al, 2007). Research on effective teaching suggests that it should be, "challenging and focused on disciplinary knowledge and conceptual understanding. It needs to be relevant to and build on students'

cultural backgrounds and personal experiences, and provide opportunities for students to engage in authentic tasks that have meaning in the world outside of school” (National Research Council, 2004, p.94).

4. Early intervention to support literacy and numeracy skill growth is a feature of schools successful in raising achievement and reducing early leaving. Some schools achieve this through offering weekly timetabled literacy and numeracy classes for students in the junior year levels (Years 7 and 8) or even across the whole school. The sessions run for 2 to 4 normal class periods per week. Through these common programs assessments are undertaken to identify levels of skills and targeted assistance is provided to students who have poorly developed skills. The research suggests that the earlier such programs are implemented the greater the success (Dickinson & Neuman, 2006; Field et al., 2007). Continuous monitoring of skills is also important.

5. Programs to counter low achievement have been tested in a number of school settings. Several programs (for example, transition programs in English and Maths, talent schemes for disadvantaged students, homework centres) have been reported as successful in raising levels of achievement and reducing levels

of early school leaving for at risk students (Balfanz, Legters & Jordan, 2004; Field et al., 2007; Lamb et al., 2004; Rumberger, 2004). The programs tend to focus on subjects such as mathematics, English and science. They often involve additional time for teaching and learning. One example is the Transition to Advanced Maths program in the United States which is designed for students who have fallen well behind in maths (Center for Social Organisation of Schools, 2008). Students undertake a year-long “double dose” of instruction in mathematics which is designed to prepare students for a more advanced sequence of high school mathematics.

6. Pathways planning and quality careers guidance and counselling are key initiatives in schools that are successful in promoting engagement and reducing early leaving. Pathways planning is organised in Victorian schools through the Managed Individual Pathways (MIPS) scheme which offers all students aged 15 and over individual assistance to develop pathways plans. A review of the scheme found that many schools reported that MIPS had improved student engagement and staff-student relations, increased the responsiveness of school staff to the needs of all students, and raised completion (Asquith Group, 2005). However, there is wide variation in

how MIPS is implemented and how successful it is. The MIPS Good Practice Framework, which outlines the essential characteristics of highly successful MIPS programs, is an important resource available to schools in the planning and implementation of MIPS. There is also variation across schools in the quality and depth of careers education and guidance. In some schools, careers education forms an important part of timetabled careers education programs from Year 7 through to Year 12. In some others, there is no regular timetabled provision and any input is achieved by targeting mainly at risk students. Some of the successful Victorian schools visited as part of the current project organized careers education around pathways planning through MIPS, but began pathways planning and support much earlier than at age 15, operating the program as early as Year 7, particularly for students at risk.

According to a study in the United Kingdom, the most successful approaches to careers education are found in schools where responsibility for delivering and monitoring the quality of provision is clearly identified, and where senior management and guidance staff co-operate closely to ensure that the various elements of careers education are effectively coordinated (Morris, 2000). Some evidence also indicates that pupils respond best where they have experienced careers education as part of their normal curriculum. Other

work points to the quality of careers teachers as a fundamental issue to success. While a well-resourced, regularly updated and easily accessible careers centre or library is important, equally vital is the quality of careers advisors. Successful careers counselling in assisting at risk students is linked to the experience, qualifications and training of careers officers. The UK review also reported that schools had variously adopted a range of successful strategies, using careers education and guidance as a means of:

- *enhancing student self-esteem or motivation.* Schools pointed to the motivational potential of careers education and guidance and some had made quite concerted efforts to capitalise on this aspect.
- *promoting lifelong learning and of reducing early school leaving.* Although all schools worked to reduce rates of early leaving, successful schools tended to make links between careers planning and the development of better lifelong learning skills.

Case study: School B – Strong careers planning integrated with welfare support

School B is a country school catering for around 1100 students, a large percentage of whom are eligible for Education Maintenance Allowance. A substantial group of students are identified as having serious welfare issues ranging from drug abuse to mental health problems.

In recent years, the school has established a careers and welfare centre that provides substantial pathways planning support as well as welfare and health co-ordination. Previously welfare support had been delivered by staff through the school's mini-schools, but the principal felt that this was "just putting out fires." Students were presenting with a complex range of needs, and careers planning could not be disentangled from social issues impacting on students.

The school's careers and health centre is staffed by a full-time coordinator, a part-time nurse, a full-time student counselor and a full-time Careers/VET coordinator. The Careers coordinator is a trained specialist. In terms of health and welfare, a local GP visits one day per week and bulk bills.

While the centre is accessed by all the school's students, it provides intensive case management for around 50-60 students who have been identified as being high-risk.

Along with this support, MIPs is implemented from Year 7, and a transition team works to strengthen MIPs work with students. There is a special MIPs plus program for students with disabilities.

The school believes it is providing broad support and a range of programs and pathways for a very diverse group of students. It claims many successes in keeping high-risk students engaged in meaningful pathways.

Strategies:

Mini-schools, careers and health centre, MIPS from Year 7, broad program of VET options, programs to improve students' work or social skills, creativity programs, co-curricular programs, project-based learning, coordination with other educational providers, case management, attendance programs, welfare coordination.

- *creating curriculum relevance*. Many of the schools in the study had set in place strategies to re-motivate disaffected students and bring about greater social inclusion. This included making a more overt link between careers education and the wider curriculum as well as differentiating provision in ways that would motivate a larger number of students (Morris, 2000).

School B highlights a successful approach to careers planning and guidance, through the establishment of a well-resourced careers and welfare centre with dedicated and appropriately trained staff.

7. Strategic use of teachers and teaching resources can help schools improve student outcomes. A recent review of government school funding in Victoria, the Student Resource Package (SRP), found that secondary schools which concentrate their resources in the senior years at the expense of the junior years tend to have poorer student outcomes (Lamb, 2007). Schools which allocated their least experienced teachers ('graduate' and 'accomplished' teachers) to the junior years (Years 7 and 8) and allocated their most experienced teachers ('expert' and 'leading') to the final years (a common model) tended to promote poorer student outcomes.

Since disaffection with school tends to increase across schooling, if younger students are allocated less experienced staff this may contribute to greater disaffection leading to higher rates of early leaving. The SRP review found that schools which had a more balanced allocation of teachers and intervened earlier through the placement of experienced teachers in junior year levels tended to promote higher levels of achievement, student engagement, and school completion, all else equal.

Similarly, in the US, Neild and Farley-Ripple (2008) examined data from a large urban district on teacher allocation and student outcomes and found that first-year high school students were more often taught by the least experienced and qualified teachers. The more experienced and more highly-qualified teachers tended to be allocated senior classes. This pattern of teacher use had both cognitive and behavioural consequences, after controlling for other factors. Schools which used this model of teacher allocation produced higher levels of student absenteeism and lower achievement than schools which allocated their teachers more evenly and strategically.

8. Smaller class sizes can contribute to better relationships between teachers and students, better quality instruction and improved outcomes if teachers adjust their styles (Pritchard, 1999). In Victorian secondary schools the largest class sizes are in the junior year levels (Years 7 and 8), on average (Lamb, 2007). A feature of some of the successful schools visited as part of the current project was a policy of smaller class sizes in the early years. This is consistent with research showing that higher teacher to student ratios reduce the odds of early leaving for at risk students (Lamb et al., 2004; Rumberger, 1995, 2004; Rumberger & Thomas, 2000). Additional support staff are also relevant (Lamb et al., 2004). Evidence from Tennessee's Student Teacher Achievement Ratio (STAR) Project shows strong advantages from being in smaller classes: students randomly assigned to smaller classes were more likely to graduate from high school than students assigned to larger classes (Finn et al., 2005). Students in smaller classes in elementary school reported graduation rates that were 11 percentage points higher than students assigned to regular classes. The impacts were even greater for children from lower SES backgrounds and for at risk students.

9. Mini-school or school-within-a-school organisation

is a more familial-based approach to pupil management involving year-level cohorts or vertically-grouped teams of students organised in a school-within-a-school arrangement. Mini-schools usually have a separate location on the school site, with a dedicated team of teachers, and aim to create a more welcoming and personalised environment. U.S. research has found that mini-schools can lower dropout rates (Kerr and Legters, 2004). They are a feature of two programs for which there is strong empirical evidence of success: *Career Academies and Talent Development High Schools* (see Table 2A in the Appendix). The approach is being used in a number of the Victorian schools successful in reducing early leaving.

Case Study: School C – Structural reform and a commitment to all students

School C is a large, multi-campus, multi-ethnic school in Melbourne. The school's Student Family Occupation (SFO, a measure of student social intake or SES), indicates a high level of student disadvantage, and there have been problems with violence in the local area. Yet the school's retention rate is well above the average for similar schools and above the average for all government secondary schools.

The principal reported that the school is strongly student-centred, and has a philosophy that all students should be provided for, and that all students can succeed. He spoke against schools implementing policies that "weed out" less desirable students, noting that, "We take all comers, but we have strong expectations of them".

He believed the school's middle-years philosophy and structure had been vital in increasing student engagement and retention. Starting in the late 1990s, the school restructured to group students in Years 7 to 10 into teams. There are teams for Years 7 and 8, and teams for Years 9 and 10. Each team of students is taught by a small group of teachers, and teachers usually teach at least 2 subjects to their team (for example, maths and science). Lesson times were increased to allow for more in-depth teaching and the development of better relationships. Each student team was physically located in a distinct area of the school. Teachers on a given team also shared a staff room, breaking down some of the subject area rivalries that

have traditionally plagued secondary schools, and fostering a more pastoral, student-centred approach.

Both principal and teachers believed that these structures and processes allowed students and teachers to get to know one another very well, and staff were certain this allowed them to pick up on student problems, both personal and academic, much more quickly. Student and parent feedback about the school is very positive, and staff morale is high.

Overall, the school documented an extraordinary range and breadth of interventions, and was clearly committed to continuous improvement of both programs and staff. Staff emphasized that establishing all the improvements they described had been a process of change over eight to ten years.

Strategies:

Mini-schools, longer lesson times, smaller groups of teachers allocated to teams of students, strong VET provision, extensive range of post-compulsory options, programs for generic social skills, project-based learning, pedagogical improvement, off-campus provision, coordination with other service providers, case management, remediation, attendance programs, welfare coordination, early intervention for literacy and numeracy, MIPS implemented early in secondary school, strong focus on careers counselling, and financial sponsorship.

10. Team-based approaches to teaching, learning and pastoral care are linked to the mini-school approach. Positive teacher-student relationships are enhanced where arrangements in schools allow teachers to develop better individual knowledge and understanding of students (Russell et al., 2005). Organisational models such as mini-schools, and strategies such as having a group of teachers dedicated to a group of students for all teaching and pastoral care, have the capacity to foster better relationships between staff and students. Where small groups of teachers are allocated to a cohort of students for all of the teaching and for pastoral care, and become responsible for the delivery of service to the students, improvements are gained in quality of relationships leading to enhanced student engagement and gains in school completion (Russell et al., 2005).

The role and importance of team-based approaches to teaching, learning and pastoral care is linked to the issue of relationship building. Students, particularly students who are disengaged, need more individualized attention at school and schools need to foster strong relationships based on mutual trust and respect. Students need strong, positive relationships with teachers and other adults at school. In addition, in several of the Victorian

schools visited for this study, strong and positive relationships between students were identified as a motivator for attending school. The schools succeeded in creating more personal settings where students feel comfortable and more connected with teachers and other staff.

School C, one of the Victorian schools that participated in the study, a school which had very high retention rates despite being one of the most disadvantaged schools (retention rates well above what would be expected given the numbers of at risk students), identified team-based approaches to teaching and pastoral care as important factors in its success.

11. Priority professional development

was a feature of a number of the participating Victorian schools. They highlighted a very strong commitment to ongoing and targeted professional development for teachers. Three areas of professional development were particularly mentioned by a number of principals. These were (1) making teaching more student-centred, (2) building relationships with students, and (3) improving teachers' classroom management skills. A fourth area mentioned in some schools was training in literacy and numeracy teaching and provision, with the training provided to all staff.

12. Community service is another strategy used in a number of successful overseas programs, notably the *Quantum Opportunities Program and the Teen Outreach Program* (Eccles and Templeton, 2002). A number of schools in this study either had community service programs or incorporated community service elements into other programs, and believed they increased engagement by fostering connections to the community and raising students' self-esteem. At least one of the schools surveyed as part of this project had a Community Elective program at Year 9, where students participated in volunteer work in external organisations such as primary schools, kindergartens, aged care homes, or animal care facilities, while another school involved students with a local special school.

13. Cross-sectoral initiatives are those involving partnerships with other community agencies and shared resources. Cross-sectoral initiatives were mentioned by a number of the schools that had improved student retention rates and innovative programs. Both Local Learning and Employment Networks (LLENs) and Regional Youth Commitments were valued by schools seeking to address completion and engagement issues, allowing schools to draw on resources and expertise within the broader community. The Regional Youth Commitments are coordinated arrangements within a region or community across all providers of education and training, as well as agencies involved in career and transition support, to improve education and training outcomes for young people at risk of not completing Year 12 or equivalent qualifications.

There are several examples of successful approaches involving Victorian schools which have contributed to retention of students in school. One is the Automotive Pathways Program established by the Hume Whittlesea LLEN which connects young people with learning through an automotive program (see DEECD, 2007). The program operates under a partnership arrangement including a TAFE college, various companies, community agencies, government and schools and provides mentoring, work-related skills development, and applied learning.

A second program is the HOPE program facilitated by the Brimbank Melton LLEN which operates in several schools. The program works for Year 9 and 10 students who are identified as being at risk of early leaving. Strategies such as mentoring, specialist support and advice are provided by community agencies and individuals (DEECD, 2007).

Another cross-sector initiative is the Out of School Hours Learning Support Program (OSHLSP) which is a volunteer out-of-schools-hours program developed in Victoria involving a variety of community agencies and centres (see DEECD, 2008). Homework programs, tutoring in key subject areas, and social support are provided to disadvantaged school students by volunteers organised or provided by various community agencies, a service supported by the Commonwealth and state governments.

14. Attendance policies and programs are an important feature in several of the schools which had achieved high retention rates despite having large numbers of at risk students. In each school there was an attendance requirement of 85 or 90 per cent of classes to pass a subject, though students were able to make up classes after school or at lunchtimes to reach the attendance requirement. Each school also designated a

staff member part-time (usually around 0.5) to follow up on student attendance with telephone calls to parents. Schools reported that this has had an impact on student achievement and on the capacity of the teachers to cover the curriculum in depth. One student was reported as saying, *“It used to be OK to be away, because the teachers would go over the work because so many kids had missed it, [but] now the teacher moves on”*. These schools each had an average student absence rate of around seven days per year, well below the state mean of 12 days. Several studies recommend intensive attendance monitoring (Rumberger, 2004; Rumberger & Thomas, 2000) as a way of increasing achievement and engagement.

A study of 59 high schools in Minneapolis found that attendance rates increased when schools had a formal policy in which students lose credit after a specific number of class absences (Petzko, 1991). The most successful programs involved implementation of a strong attendance policy with a system for parental contact for students where attendance was an issue. In one successful model, parents could use the internet or phone to monitor their child’s attendance with attendance at each class recorded electronically by teachers. In another, dedicated staff monitor student attendance and contact parents when issues arise.

Similar evaluations have found that the most effective programs having a clear attendance policy with hurdle requirements, and having a dedicated staff member to monitor and follow-up cases of chronic truancy who works with parents and students in multiple ways to address issues (Epstein and Sheldon; 2002).

15. Initiatives to improve connections with parents were outlined by a number of schools that had increased retention, and are an important feature of some of the most successful overseas programs, notably the Achievement for Latinos through Academic Success (ALAS) program. There is by now substantial research evidence of a positive association between parental involvement with the school and student achievement, net of other factors (Jeynes, 2007). Amongst the schools in this study, various means had been used to improve communication and foster stronger relationships with parents. In particular, a number of the schools reported that they had switched to student-led interviews rather than parent-teacher interviews. The focus of the interview then became the student reporting on their progress to date, their strengths and weaknesses, and their future plans. This placed responsibility back on the student, and was felt to have made interviews much less threatening for parents of struggling students.

One school that had switched to student-led interviews reported an increase in parents' attendance from 25 percent to over 80 percent, another had increased attendance from 30 to 80 percent. Other initiatives used by schools in the study included out-of hours social events, offering educational programs for parents, and using the Parents As Careers Transitions (PACTs) program.

16. Conflict resolution, mediation or problem solving programs are designed to create safe learning environments. Resolving conflict and preventing violence are important factors in creating a safe learning environment. Anti-bullying and anti-aggression programs have proven to be effective in reducing misbehavior, vandalism and general delinquency in schools. Fox et al. (2003) report on several programs such as the *Olweus Bullying Prevention Program* and *The Incredible Years* which have both proven successful in reducing bullying and violence. The Incredible Years is designed for children with high levels of aggressive behavior, and trains parents and children in problem solving and other non-aggressive social skills.

Other programs are more broadly based, encouraging students to become participating members of the discipline programs in the schools and have students be part of developing and designing those discipline policies, as well as enforcing those policies by giving them the skills to deal with all conflicts constructively. Several schools visited as part of the survey for this study used *Restorative Justice* as a mechanism for dealing with conflict resolution, as a response to handling cases of bullying and as a general approach to relationships and building a safer school environment. One school provided a teaching program aimed at assisting students to improve their skills in resolving disputes, managing conflict, and communicating in ways that promote strong relationships. The same school also used peer mediation as a form of direct intervention to deal with specific cases of conflict.

5.3 Student-focused strategies

While reform of school programs and curricula is important in increasing student completion, at risk students often struggle with a variety of social and personal issues that affect engagement and the quality of learning. Individual-level strategies seek to address these problems. The provision of strategic, targeted welfare and skill programs can have a substantial impact on the capacity of at risk students to remain in education.

1. Student case management is one of the most effective strategies for directly assessing individual student need, targeting appropriate assistance and monitoring progress. Case management can be organised in different ways. One example is a US-based program, “Achievement for Latinos through Academic Success” (ALAS), which is a junior high school intervention designed to address student, school, family, and community factors that affect engagement and retention. Every at risk student is assigned a counsellor who monitors attendance, behaviour, and academic achievement. The counsellor provides feedback and coordinates students, families, and teachers, or other supports that the student may need. Counsellors also serve as advocates for students and intervene when problems are identified.

In Victorian schools, careers teachers often work as case managers through their roles in the MIPS program. The most successful schools implemented the program from Year 7 in order to identify and assess individual student needs as early as possible, particularly for students at risk, and provided intensive and ongoing intervention through case management. Welfare staff played this role in some schools. Evaluations of various programs that use case management as a key feature often report positive gains (see, for example, Gandara, Larson, Mehan & Rumberger, 1998; Strategic Partners, 2001). The review of various programs established as part of the Full Services School Program in Australia reported that, in looking at features and outcomes across all schools, case management was the major factor in the most effective projects developed to help retain students in education and training and promote successful transitions to further study and work (DETYA, 2001). Effectively targeting greater resources to case management for at risk students is likely to have a positive impact on student retention.

2. Mentoring provides one-to-one support for students that can encompass guidance on study and school work, assistance with homework, career and financial planning, or social and emotional support. It is one of the most commonly-used strategies in effective programs found to keep students in school and engaged. Mentoring is a way of ensuring that a student has a continuous and caring relationship with a trusted adult. Programs that have used mentoring to increase student retention and engagement include *Big Brother, Big Sister*, the *Check and Connect* program and the *Twelve Together* initiative (WWC, 2007; Tierney, Grossman and Resch 1995, cited in Cunha and Heckman, 2006). Research on these programs suggests that the programs can increase attendance, promote positive attitudes toward schools, and improve achievement.

In the schools visited as part of this study, mentoring beyond what happens through MIPS was reported by eight schools as improving retention. Some schools used teaching and welfare staff for mentoring purposes, others were assisted by outside welfare agencies. Mentoring was targeted to students deemed at risk, particularly where there were social problems — one school targeted mentoring to students who were seen as quiet, lacking resilience and unconnected to other students or staff.

One effective overseas program using a blend of mentoring, case management and attendance monitoring is described in the case study below.

Case study: Effective mentoring program – Check and Connect

Check and Connect is an example of a program that is targeted at the most at risk students, and there is good research evidence supporting its effectiveness in engaging and retaining these students (Sinclair et al, 2005).

The program is designed to monitor the progress of individual at risk students through case management as well as other supports. The program has two main components: “Check” and “Connect.” The Check component is designed to continually assess student engagement through close monitoring of student performance and progress indicators. The Connect component involves program staff giving individualized attention to students, in partnership with school personnel, family members, and community service providers.

Students enrolled in Check & Connect are assigned a “monitor” who regularly reviews their performance (in particular, whether students are having attendance, behaviour, or academic problems) and intervenes when problems are identified.

The monitor also advocates for students, coordinates services, provides ongoing feedback and encouragement, and emphasizes the importance of staying in school. The monitor uses individual intervention strategies to help the student develop habits of learning and successful engagement. Relationships are established with both the student and the student’s family. Monitors check on student attendance and academic performance regularly, provide feedback to the student about their progress, model the use of problem-solving skills, communicate frequently with families, and listen to students’ personal concerns.

The program uses a blend of case management, mentoring, encouragement and focuses on attendance and reducing absenteeism, together with helping students develop better strategies for solving problems and developing relationships.

Strategies:

Case management, mentoring, attendance programs, programs to improve students’ work or social skills.



3. Welfare support is essential for students who have high levels of need associated with family or personal problems. Such problems as poverty, drug or family abuse, teenage pregnancy, and homelessness can be substantial barriers to engagement in school. One important tool for helping Victorian schools address students' welfare needs is the School Focused Youth Service (SFYS). The SFYS coordinates the delivery of preventative and early intervention services for students at risk, developing partnerships between youth services and using additional funds to address any gaps in service delivery. Integrated service models and on-site support services also have a positive impact on engagement (Lamb et al., 2004). One of the schools visited as part of the current study, innovative in this area, had established a welfare centre with a welfare co-ordinator, school nurse and a visiting GP. The centre provides co-ordinated services for students in need as well as operating programs on interpersonal and social issues. Another school (School D described below) with a strong focus on welfare offers similar programs.

Case study: School D – A focus on welfare.

School D is located in a regional centre of Victoria. The school receives SFO equity funding because it serves a largely disadvantaged community in SES terms.

The school has a strong focus on student welfare. Welfare initiatives include an elective program for at risk students in Year 9, which focuses on interpersonal and social issues. Students in the program discuss relationships and the transition from Year 8 to Year 9 with a small group of staff that includes the welfare coordinator and the school nurse. There is also an intensive mentoring program for at risk students in Year 8, in which trained mentors talk with students about career options, self-esteem and family issues. Mentors also assist with school work.

The school also runs a breakfast club for students which fosters relationships and allows some students a healthier start to the day. There is intensive pathways work for at risk students in Years 10 to 12, and a special engagement program

for the school's indigenous students, of whom there are around 40. The school has worked hard to forge strong links with a range of welfare and support providers.

While the school believes much progress has been made, it has struggled to overcome some obstacles. It pointed to a large number of students from stressed family circumstances, many of whom end up living independently or in foster care from a very young age. Staff commented that in these circumstances it can be extremely difficult to promote regular attendance patterns and good study habits.

Strategies:

Mini-schools, small team of teachers allocated to a group of students, vocational provision, programs for generic social skills, teacher professional development, off-campus provision, coordination with other service providers, mentoring, case management, welfare coordination.

4. Targeted assistance for skill development among low achievers

can help improve the academic skills and achievement of at risk students. Low achievement is strongly associated with early school leaving. Targeted assistance, whether individual or group, preferably in the early years of secondary school, is one means of addressing this. Academic programs that counter low achievement, such as literacy and numeracy courses, homework centres, and remediation programs in key subject areas, can be successful (Field et al., 2007; Lamb et al., 2004; Rumberger, 2004).

5. Tutoring and peer-tutoring are mechanisms for providing targeted academic support for at risk students. One-on-one tutoring is a strategy for providing extra help to disadvantaged students at all levels of school. With the recruitment of adult volunteers and various peer-tutoring strategies, schools can provide many underachieving students with the type of one-on-one instruction to raise their skill levels and achievement. An evaluation of 65 rigorous studies of the impact of tutoring programs found varying, but positive, achievement effects across all of the studies (Cohen, Kulik, and Kulik, 1982).

6. Supplementary or out-of-school-time programs are those offered by schools as after-school programs or programs run during the holidays to supplement the education of low-achieving and at risk students. The programs, usually school-based, often focus on reading, literacy, numeracy and cultural enrichment. A review of 35 studies of supplementary programs for assisting at risk students in reading and mathematics found small positive effects on student achievement and larger effects for targeted programs such as tutoring in reading (Lauer et al., 2006).

An example of a Victorian model is provided by the Out of School Hour Learning Support Program which is organised through a variety of community agencies and provides a range of support activities for disadvantaged students including homework programs, subject-specific tutoring, and social support (DEECD, 2008). The program is community-based and generally involves volunteers organised and coordinated by community agencies.

7. Pathways planning for at risk students needs to begin early. Careers and pathways planning are important elements in helping keep students engaged (Morris, 2000). Effective careers education with early pathways planning for at risk students can help students plan and help identify areas that require assistance or focus. Successful careers counselling in assisting at risk students is linked

to the experience, qualifications and training of careers officers (Morris, 2000). In the survey of Victorian schools undertaken for this study, effective schools, in terms of promoting student engagement and completion rates, implemented pathways and careers planning, MIPS, for at risk students in the junior years (Years 7 and 8) and supported their effort through having dedicated staff with appropriate qualifications and training.

8. Targeted financial support is important to students where their own or their family's need for more income becomes a powerful incentive to leave school. Financial sponsorship can be an important means of allowing such students to remain in school. Five of the participating schools mentioned that they used scholarships from philanthropic organizations such as "Western Chances" to help students remain at school where financial matters were placing the students at risk of dropping out. Some charitable organisations provide mentoring support along with financial support, and this also helps students stay in school. For example, a program of student support by an Australian non-government agency is the *Learning for life program* developed by the Smith Family (Smith Family, 2000). *Learning for Life* provides two types of assistance for students: (1) financial assistance to cover the costs of textbooks and incidentals such as excursions and transport costs; and (2) case management of each student and their families.

9. Project-based learning programs for disengaged students

attempt to re-engage school students who have largely become disengaged from learning, have fallen behind and are at risk of dropping out. There are several examples. One is entitled “Hands-on Learning” and was employed in one of the Victorian schools visited as part of the study. The program is designed for at risk students in Years 7 to 10. Students enrolled in the program attend their regular school four days per week, and the *Hands on Learning* program (which runs on-site at their school) for one day per week. The project is staffed by one teacher and one artisan, a person with practical skills in building and design. During their *Hands on Learning day* each week, students work on real-life construction projects such as building a fence for a community organization, or creating a mosaic footpath for a local kindergarten. Work is commissioned by schools or local organizations, which provide materials, and the program focuses on ‘learning by doing’. A strong emphasis is placed on relationship building, which is seen as central to the program’s philosophy. Students are placed in small multi-age groups of 8-10 students, older students are encouraged to take on leadership roles, and past students are encouraged to mentor current students.

Generally, students join the program for around two terms, although some students can remain in the program for up to two years. The project is currently undergoing a formal evaluation, but school and project staff believe the project has been highly successful in reengaging students and building their skills and self-esteem. They report increased attendance for participating students (both for the *Hands on Learning* program and regular classes) and improved behaviour. Participating students report higher levels of interest and engagement in school, and an increase in interpersonal skills.

Another example is the Schools-Community Water Resources Project (SCWRP) which targets at risk students in Years 8 to 10. While students from any background can participate, there has been a particular emphasis on involving indigenous students. A number of secondary and special schools are involved as well as many community organizations. The project aims to foster student retention and engagement, develop links with the community and improve students’ employment outcomes. It also aims to assist the local communities to address skills shortages. While the project appears to operate in distinct ways in each school setting, the

focus is on improving employability skills through work on a range of land- and water-based projects in the community or at the school. At-risk students are counselled to select the project as an elective, and classes form part of the normal school timetable, usually for around one period per day throughout the year. As with *Hands on Learning*, SCWRP engages students in project-based learning involving genuine projects with tangible outcomes. Projects have included garden development, greenhouse construction, tree planting and water-watch programs.

10. Creative arts-based programs for

at risk students have been tried in schools both in Victoria and overseas. The Creative Partnerships program in the United Kingdom, for example, is a government-funded schools program organized by Arts Council England. The program aims to improve the achievement and engagement of children, particularly at risk students, through the establishment of collaborative partnerships between schools and creative and cultural organisations and individuals. Creative practitioners (artists, landscapers, architects, designers, dancers, film-makers etc.) work in selected schools with groups of disadvantaged or at

risk students who have tended to become disaffected with school. The practitioners establish projects lasting from a few months to several years with selected groups of students. The aim is to engage students in team-based creative arts projects which help foster greater self esteem, success, creativity and positive attitudes towards learning. The focus is on re-engagement of the disaffected. Evidence from evaluations of the UK program suggests some success in raising levels of student satisfaction in school, engagement, and achievement. For example, a study by the National Foundation for Educational Research (NFER) reported that compared with similar young people in the same schools, those who participated in Creative Partnerships activities performed slightly better at each of the key stages of learning and assessment (Eames et al., 2006).

11. Programs to improve students' social skills and self-esteem have been used in a number of successful overseas programs to reduce student dropout. For some at risk students, early school leaving can be associated with an inability to negotiate successfully school situations that cause them stress, leading to suspensions and expulsions, and to lower levels of achievement. Programs such as *Achievement for Latinos through Academic Success (ALAS)* and *Check and Connect* incorporate sessions teaching problem-solving and conflict management skills to enable students to forge more productive and harmonious relationships at school, reducing the likelihood of suspension or expulsion, and potentially increasing a sense of belonging. A number of Victorian schools in this study also had targeted programs to build the confidence and conflict management skills of their most at risk students.



5.4 Addressing the needs of specific groups of students

While students can be at risk of disengagement from school for a variety of reasons, research suggests that some groups are more at-risk than others of disengagement, poor progress and failure to complete.

The following groups tend to be most at-risk of low achievement, disengagement and early leaving:

- indigenous students;
- refugee students;
- students with disability and integration needs;
- students with particularly complex welfare needs, including those with mental health issues, those in foster care, those living independently and those caring for parents with physical or mental health problems.

There is some research indicating that certain types of interventions may be particularly suited to meeting the needs of each of these groups of students. However, it should be stressed that there appears to be very little research that empirically assesses the differential impact of strategies on retention rates for particular groups of students. The recommendations outlined below are based largely on qualitative assessments of program effectiveness and on participant feedback.

Indigenous students

Indigenous students in Australia have some of the poorest educational outcomes of any group, with low achievement levels (MCEETYA, 2004) and low retention rates (Schwab, 1999; Lamb et al., 2004; Helme, 2007). There have been a large number of initiatives designed to increase the engagement and achievement levels of indigenous students, although there appears to be little empirical assessment of program effectiveness in increasing retention.

Examination of successful programs and initiatives reveals some commonalities. An outline of successful strategies has identified a number of factors needed to increase the engagement of indigenous students (DEST, 2005). These are:

1. *Cultural acknowledgement, recognition and support.* This includes provision of professional development to staff to raise awareness of indigenous culture, involvement of the indigenous community in educational planning and provision, and increasing respect in the broader school community for indigenous languages and culture.
2. *Targeted skill development.* This involves early intervention for learning difficulties, and the implementation of explicit models of teaching and learning. In doing this, it is also essential for schools to recognise that, for many indigenous students, English is not their first language.

3. *Participative engagement.* The report identifies the provision of a welcoming environment free from racism and the empowerment of students through involvement in decision making as essential to improving participation.

Case studies of schools that have been effective in increasing the participation and retention of Aboriginal students tend to draw on all three strands. Developing an inclusive, safe school culture would appear to be particularly important in increasing indigenous student participation and retention, with attention paid to increasing student autonomy and responsibility.

The relatively strong rates of VET participation by indigenous Australian students (Helme, 2007) would also suggest that the provision of quality vocational programs is a vital means of increasing indigenous student retention in Victoria. A number of the successful schools in this study with significant indigenous student populations provided a range of vocationally-oriented programs and activities.

The literature and the results of this study indicate that the following strategies may be particularly helpful in addressing the needs of indigenous students in Victoria:

- offering quality VET options that dovetail with local employment markets;
- early intervention to support literacy and numeracy skill growth;
- targeted assistance for skill development among low achievers;
- project-based learning; and
- attendance policies and programs.

These initiatives need to be carried out within a framework of building bridges to local indigenous communities and seeking input from them in shaping students' educational experiences and goals.

Refugee students

The needs of refugee students are being addressed currently in Victoria through a series of initiatives including intensive English language tuition through the New Arrivals program, English as a Second Language programs in mainstream schools, targeted Transition Initiative programs to support transition to mainstream education, and multi-cultural aides. The needs of refugee students can extend well beyond those of language skills development. Refugee students can include those who are traumatised by experiences of civil war or unrest in their country of origin, and those who have had little or no previous experience of schooling. The multiple and complex needs of these students pose substantial challenges for schools.

In response to the difficulties recently arrived refugee students face in dealing with the levels of English language skills needed to attempt the Victorian Certificate of Education (VCE), transitional Victorian Certificate of Applied Learning (VCAL) programs were established in several Victorian secondary schools for refugee students (see DEECD, 2008). The programs are tailored to the language skill levels of students, and focus on expanding the options available to refugee students. They do this through maintaining and emphasis on the further development of skills in English language, literacy and numeracy and articulation of pathways to further education and training courses. The programs work to promote student engagement and school completion through targeted assessment of individual and group needs, and coordinated response.

Another support program includes the Out of School Hour Learning Support Program (OSHLSP) which is organised through a variety of community agencies and provides a range of support activities for refugee, and other disadvantaged, students including homework programs, tutoring, social support and sporting activities (DEECD, 2008).

Given the sorts of issues associated with refugee status, successful interventions are likely to include:

- case management;
- smaller class sizes;
- intensive coordinated welfare support,;
- supplementary or out-of-school-hours programs; and
- targeted assistance for skill development.

Mentoring is also likely to be of some assistance if mentors with the appropriate language skills and cultural awareness can be identified.

Disability and integration students

Students with disabilities form an especially vulnerable group in terms of early school leaving. International research indicates that students with identified disabilities are twice as likely to leave school early as those without disabilities (Blackorby and Wagner, 1996). Disabilities themselves can be powerful barriers to learning, quite apart from the additional practical barriers they may raise in terms of access to education. Poor achievement and early school leaving are particularly prevalent among students with learning disabilities or emotional and behavioural disorders (Scanlon and Mellard, 2002).

There is evidence that cognitive-behaviour therapeutic programs can impact on the capacity of students with emotional and behavioural disorders to complete school education. CBT programs for these students usually incorporate problem-solving skills, conflict management skills, self-talk and relaxation skills and self-awareness skills. Cobb et al (2005) examined the empirical evidence for the impact of these programs on student dropout, and concluded that, for students with emotional and behavioural problems, they increase retention by increasing students' capacity to deal with the social aspects of school.

Another important factor associated with early school leaving amongst those with learning disabilities or emotional and behavioural disorders is a high rate of student mobility (Osher, Morrison and Bailey, 2003). This would suggest that optimal communication and coordination between educational providers, and between schools and welfare bodies, is essential in making sure that these students' needs continue to be met in spite of moves between schools, and increasing completion rates. Because some of these moves may be due to student expulsions, schools also need to be supported in trying to retain these challenging students in the one school setting.

Finally, mentoring programs may enable these students to experience continuing stable encouragement and support from an adult, where school change is unavoidable, thus reducing the risk of early leaving (Sinclair et al, 2005).

Students with learning disabilities, and those with emotional and behavioural disabilities, also tend to exhibit lower average levels of achievement. Strategies that address achievement issues — early intervention, targeted assistance for skill development and tutoring — will also be necessary to increase retention amongst this group.

Some overseas studies have reviewed interventions specifically designed to reduce early leaving among students with disabilities, particularly those at greatest risk, those with learning disabilities and those with emotional or behavioural disabilities (for example, see Thurlow, Sinclair, & Johnson, 2002). The findings suggest that the following strategies may be beneficial for students with integration needs:

- case management — to help monitor, review and assess the occurrence of risk behaviors,
- mentoring — to help establish a caring and positive relationship between an adult and the student,
- team-based approaches to teaching, learning and pastoral care — to help develop a sense of belonging to school, and
- programs to improve students' social skills — to impart skills students need to help them survive in challenging school, home, and community environments.

Students with complex welfare needs

Some students have very complex welfare needs that have a profound impact on their ability to attend school, complete homework and concentrate on their studies. These are students who may no longer be in a stable family environment, those living independently, pregnant teens, those with mental health issues and the homeless. Students in these circumstances have to take on adult tasks such as meal preparation, caring for others, and fending for themselves, and do not have parents providing the structures and support for general well-being and to complete school-related tasks such as homework. Students living with foster parents may have more adult support, but are usually dealing with trauma from their past and may have experienced very high levels of mobility, in itself a risk factor for early

school leaving (Rumberger and Larson, 1998). Schools may often feel ill-equipped to deal with students in these circumstances, and struggle to respond appropriately to students, particularly when the numbers of students with such welfare needs grow.

While there appears to be little research specifically focusing on interventions for students with these types of needs, some of the strategies identified in this report will be essential to help raise levels of achievement, engagement and retention amongst this group. Clearly, strong and active links to welfare providers and coordination of welfare provision is vital. Mentoring and case management will assist these students by providing caring and supportive relationships with an adult. Financial assistance will also be important, and out-of-school time programs may help such students with school work and provide targeted assistance for skill development.



6. Qualities of Effective Strategies

Common strands appear to run through the most effective programs and strategies.

The most effective programs appear to do the following:

- **Foster connectedness**

Many of the initiatives, such as mini-schools, are ways of reducing students' social isolation and strengthening relationships between students, parents, staff and the broader community. Participants commented that some of the most at risk students have poor social skills and limited connections beyond their immediate family, and effective programs enabled students to increase both the number and quality of the connections they had with the school and the local community. In both this and other studies, schools with high retention had also worked hard to increase parents' involvement and connectedness with the school. Relevant strategies include mini-schools, smaller class sizes, mentoring, student case management, peer tutoring, community service and supplementary or out-of-school-time programs.

- **Increase the trust placed in students**

Because of low achievement or poor behaviour, many at risk students have experienced verbal or non-verbal messages from adults communicating low expectations and low trust. Having high expectations of students sends a powerful message that staff believe students are not limited by past behaviour or achievement, and can do more. Strategies and school cultures that give students real power and responsibility also tell students that the school believes they can do the right thing. Strategies such as community service or cross-age tutoring can allow students who have usually been on the receiving end of help to see themselves as capable of offering help. Relevant strategies include community service, peer tutoring, and some project-based learning.

- **Provide tasks with immediate, tangible benefits**

Some at risk students, particularly those from abusive backgrounds, can find it very difficult to trust adults, and given their past experiences this may be a wise response. Yet the traditional abstract secondary school curriculum and examination structure requires students to place a lot of trust in teachers and schools – to believe that apparently irrelevant learning will have some application later, and that

learning abstract skills and knowledge now will have a payoff years hence. Offering project-based learning and vocationally-oriented coursework allows students to participate in learning that is immediately relevant and provides students with concrete evidence of achievement. Relevant strategies include project-based learning, offering quality VET programs and creative arts-based programs.

- **Make spaces within schools and curricula for diverse student needs**

Many strategies, such as off-campus provision or programs for teen parents, recognize the diversity of student needs and interests. Schools that had achieved significant increases in retention also spoke about flexibility as a key aspect of school culture – a willingness to alter school practices to meet student needs. Relevant strategies include offering quality VET options, broad curriculum provision in the senior years, and cross-sectoral initiatives.

- **Address poor achievement**

There are strong links between students' levels of achievement and the likelihood they will remain in school. Substantial remediation programs, professional development to improve the quality of teaching, placing strong teachers with low achievers and student attendance programs work to improve student achievement. This in turn has an impact on retention. Relevant strategies include targeted assistance for skill development among low achievers, strategic teacher placement, programs to counter low achievement, tutoring and peer tutoring, priority professional development, and attendance policies and programs.

- **Address practical personal obstacles to staying at school**

Many at risk students face practical barriers to remaining in education, ranging from the problems of living independently to lack of funds for textbooks or activities. Strategies such as case management, welfare coordination and financial scholarships enable students to deal with some of these issues. Relevant strategies include welfare support, case management, attendance programs and financial sponsorships.



7. Making interventions work

While this paper has identified that schools can take quite diverse approaches to addressing the needs of at risk students, there are some common aspects to schools that have been successful.

Rumberger (2004a), a leading researcher on factors affecting student completion, noted that for schools to reduce early leaving, they need to address academic and social behaviour, focus on both individual and institutional factors, and begin early in students' academic careers. The international literature review conducted for the study highlighted that schools which successfully address engagement and completion issues often share certain characteristics, and these were also apparent in the most successful schools that participated in the survey of Victorian schools undertaken for this study.

Early intervention is best

The most effective schools in the study were proactive in their approach to students, identifying problems at an early stage in their secondary school careers and working to address them before students had become disengaged. This could be seen in practices such as providing substantial remedial programs from Year 7, forging strong links to feeder primary schools, and starting MIPs planning with at risk students at Year 7 or 8, rather than waiting until Year 10. Again, this is in keeping with research suggesting that earlier intervention with at risk students has more impact and is more effective than late intervention (Cunha and Heckman, 2006).

Schools need to ensure interventions are sustained

Schools visited as part of this project reported that program continuity and long-term support for students were vital. A number of principals commented that they allowed time and funding for initiatives to be embedded in the school culture and then modified to maximize their impact. Principals also stressed the importance of funding stability and staffing stability in creating the necessary environment for change. One principal of a school with unusually high student retention commented, "One-year programs are a waste of time – it has to be longer term." Another commented, "The belief system behind all of this is that for whatever reason, our children do not have the social capital to manage this movement from Year 7 to Year 12 in an independent manner. They need props, supports, models at every step."

This is in keeping with research on some overseas interventions indicating that, while the programs have positive effects, these effects are often not sustained over time if the intervention is abandoned (Gandara, 1998, cited in Belfield and Levin, 2007; Cunha and Heckman, 2006).

Schools need to adopt multi-faceted approaches

In most effective schools, staff report that no single strategy works alone to increase student engagement and retention, although some strategies are more important than others. Rather, it is important to approach different needs associated with engagement and retention using a combination of strategies, using a multi-faceted rather than singular approach. For example, the literature on schools successful in reducing early leaving shows that while individual mentoring may be one program that keeps at risk students connected to school, professional development to improve the quality of teaching is also important, as are many other strategies. The most effective programs identified in the literature review tended to involve several approaches or strategies. It means that schools need to consider using an integrated, multi-strand approach to addressing the needs of at risk students. This could mean, for example, addressing social issues and practical problems, using strategies such as individual case management, while also putting in place strategies that improve the school's program provision, such as broadening the curriculum and strengthening teachers' teaching and class management skills.



Context sensitivity is essential

Although many of the strategies identified in the paper were seen in a range of school settings, staff interviewed for the project commented frequently on how important it was to adjust strategies according to the needs of the local students and parents. So, while virtually all the identified schools had worked to improve connections with parents, in the case of one school with a large number of parents from non-English speaking backgrounds, this had taken the form of developing a very visual newsletter with many photos, which allowed students to translate for their parents, explaining events and identifying people at the school. Schools that had increased engagement and retention adjusted strategies to fit with students and parents.

Supportive school culture greatly improves effectiveness

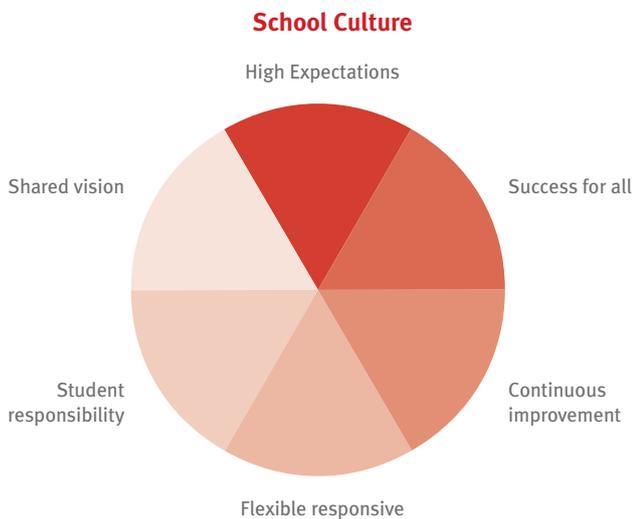
While the paper has discussed specific intervention strategies, principals in schools achieving high retention rates here and overseas (Socias et al., 2007) were clear that these should not be implemented *ad hoc*. Those schools which were most successful in raising student retention had an integrated approach, underpinned first, by a well-articulated philosophy that drove all aspects of provision and second, by a culture of continuous improvement. Principals and staff at these schools stressed that all students were able to achieve, that if students were not engaged then the school needed to change what it did, and that while successes were celebrated, every initiative was there to be built upon. In the most successful schools there was school-wide ownership of student engagement and achievement.

7.1 Planning for success

For schools to increase student participation in the senior years of school, two processes need to be put in place at the school level. First, schools need to seriously consider and plan to create an effective school culture. The elements of the type of culture that is likely to strengthen student retention are graphically presented in the following diagram:

Thus, schools need to be working to develop a school climate that is built on a shared vision of success for all students, a culture that holds high expectations of staff and students but is responsive to student needs. Schools need to provide opportunities for students to move towards adulthood by giving them a degree of autonomy and responsibility, and the whole school needs to monitor and change its offerings as needs are identified or shift, continually improving staff and programs.

Second, schools need to consider some of the strategies outlined in this paper, identify where these might meet student needs in their school, and develop and implement a whole-of-school plan to increase student engagement. It may be useful for schools to consider which particular needs from the following diagram are strongest in their setting, and choose strategies accordingly.



7.2 Responding to school size and location

School location may affect the capacity of the school to implement some of the interventions and initiatives outlined previously. Schools in rural and remote areas, for example, may be more limited in their capacity to access, for example, off-campus provision or some types of teacher professional development than schools in urban centres.

School size may also place some restrictions on the feasibility of implementing some of the strategies. A small school may face, for example, more difficulties in offering students a full or broad range of subjects and vocational courses in the senior years, and smaller schools are more limited in the staff they can draw on to offer additional supports such as co-curricular activities. However, small schools, particularly those in rural areas, may have less need for some of the strategies that work to foster connectedness, such as mini-schools, because of the relationships that teachers can promote with a smaller number of students.

One of the critical issues in relation to school size is the costs of interventions. If small schools have a high concentration of high-need students then this may place restrictions on the types of interventions that can be implemented, due to costs. In the schools visited as part of this study many of the larger schools were able to implement a variety of interventions and meet the costs within their current SRP allocations. This is harder in smaller schools. However, it is possible for small schools to reduce the costs of programs by sharing resources across schools. Regions could play a role in assisting small schools to coordinate this.

Schools need to bear in mind that not all the strategies described in this paper will necessarily be appropriate for their particular setting.



8. Measuring potential impact

This paper has presented a range of initiatives that have been identified from research as successful in improving student outcomes or are currently being used by schools successful in reducing early leaving.

There is evidence to suggest that these strategies work. But the strategies to improve outcomes for at risk students involve a major investment of resources, time and energy on the part of schools. Effective implementation will require careful planning and design, but also careful evaluation. It is important for schools to be able to evaluate whether or not the initiatives they implement are working.

In planning and design there will be a need to decide on what outcomes the school would expect to see as a result of implementing the initiatives to address the needs of at risk students. In the context of evaluation, these ‘indicators’ reflect what the program will accomplish and what outcomes will result for the participants, including teachers, support staff and the school as well as the at risk students. Progress against these indicators can be assessed by identifying an appropriate ‘measure’ or ‘measures’ which are recorded at different intervals, according to what is being evaluated. Measures may be quantitative or qualitative.

Data collected by the system on student, staff and parental satisfaction, the regular AIM achievement assessments at Years 7 and 9, data on student absences, as well as measures of retention (apparent and real) and senior school certificate results can be used to help evaluate a range of the interventions, particularly those at a school level, though also for those targeting specific groups of at

risk students. The school level annual reports on performance provided to each school also provide useful information for measuring change and progress. The system-collected data can be supplemented with program-specific measures within schools including monitoring of progress through reports from key participants, information on attendance and absences for students, teacher provided data on classroom behaviour and progress, regular monitoring of student progress, and, where appropriate, data collected from questionnaires or interviews with participants, depending on the type of intervention.

Measures of impact and progress will need to be sensitive to the time over which change can be expected. Some interventions, particularly school-wide initiatives, may take several years to display effects. Others, such as those addressing the welfare needs of individual students or groups of students may show more immediate effects in terms of changes in student engagement, as well as longer term consequences associated with school completion.

It is also important to recognise that some interventions may show limited impact for a variety of reasons, not all of which are related to the quality of the intervention. Evaluation needs to include reflection on the program or intervention process itself — management, finances, implementation, training, staffing, context and operation.

Schools will need to plan how to evaluate program impact. Some evidence is available on the likely impact of different interventions from various program evaluation studies in the research literature. This work may help schools decide on which interventions to consider implementing. Table 2 presents some interventions associated with well-researched or documented programs and the potential impact that might be gained, based on the findings from rigorous research evaluations. The impact is presented in terms of improvements in rates of school completion among disadvantaged students. The source of the assessment is also provided.

Table 2 Potential impact of selected programs subject to empirical evaluation

Features of intervention	Example of program	Potential impact based on research evidence	Source
Mentoring Attendance monitoring Remediation Programs to improve students' social skills Family interventions	Achievement for Latinos through Academic Success (ALAS)	Raise completion rates by 5 -10%	Belfield and Levin, 2007 What Works Clearinghouse, 2007
Mini-schools Coordination with other providers Providing vocational courses Intensive careers planning	Career Academies	Raise completion rates for at risk students by 10–20%	Kemple, 2004 Kemple and Snipes, 2000 What Works Clearinghouse, 2007
Mentoring Attendance monitoring	Check and Connect	Raise completion rates by up to 20%	Sinclair et al., 2005 Belfield and Levin, 2007 What Works Clearinghouse, 2007
Small learning communities More time with fewer teachers Mentoring Teacher advocacy Rigorous curriculum/high expectations Teacher professional development	First Things First	Raise completion rates by up to 20%	Belfield and Levin, 2007 Quint, 2005
Mini-schools Longer lesson times Fewer teachers teaching a group of students Providing vocational courses Remediation	Talent Development High Schools	Not known	What Works Clearinghouse, 2007
Mentoring Case management Remediation Family interventions	Talent Search	Raise completion rates by 10 – 15%	Belfield and Levin, 2007
Peer support Mentoring	Twelve Together	Raise completion rates by 10 – 15%	Belfield and Levin, 2007

9. Challenges to implementation

Changing how schools operate and what they offer their students is rarely a problem-free process. Participants in this study were asked to describe challenges that they had encountered in implementing change, or barriers that were currently operating to reduce the effectiveness of their programs.

Table 3 lists the types of challenges mentioned by participating schools.

Challenge	Details on the challenge
Staffing and staff skills	Finding appropriate staff Retaining appropriate staff Accessing teacher PD for VCAL or VET
Attitudinal barriers	Subject and course status (VET/VCAL seen as lower status) Low student aspirations Low parental aspirations Resistance to change (Students/parents/teachers) Excessive parental aspirations Parent lack of knowledge Low teacher expectations
Resources	Insufficient funding High cost of VET provision Additional family costs of VET Inadequate or inappropriate facilities Lack of funding continuity
Organisational barriers	Timetabling issues
Systemic or regional issues	Lack of allied support staff Site rather than system view (encouraging competition) Competition with non-government schools for students and/or staff
Other issues	Lack of options for students under 15 Student transport to other sites Small school size limits breadth of subject offerings Student transience/mobility Lack of coordination across providers and government departments Students' home/family circumstances

Attitudinal challenges were frequently mentioned by participating schools. A number of schools reported that parents with low levels of education sometimes believed that leaving early had done them no harm, and so would not harm their children. In contrast, other schools reported that some parents' refusal to countenance anything other than a university career for their children meant that students inappropriately took a VCE pathway, struggled, then dropped out. The lower status of more vocational pathways was a real attitudinal concern for some schools. Attitudinal barriers on the part of some staff could also be a problem. One principal commented, "If you have a high retention rate, you're retaining the students who are hard work. Some staff have issues with this – they feel it's to the detriment of other students. These teachers find these [at risk] students challenging." Amongst both teachers and principals, there can sometimes also be the belief that leaving to go to a job is a good outcome (New Zealand Ministry of Education, 2006). While undoubtedly it is a better outcome than unemployment, nevertheless research indicates that jobs for those who have not completed secondary education tend to be the first to disappear in times of recession, and the last to return when the economy recovers. Principals, teachers and parents need to become aware of the importance of aiming to retain all students in education and training until the end of Year 12.

Whilst some schools are implementing these strategies within existing budgets, many identified a lack of funds as a challenge. Concerns included funds to implement new courses, train staff, or simply address the multiple social needs presented by at risk students. One principal commented,

"We need more funding for welfare issues. There is little recognition of the social capital issues impacting on schools like ours – drug dependency, family violence, single parenting and so on. It can be very hard work shifting cultural things like the attitude to attendance."

Another participant talked about the level of community poverty affecting the school's capacity to raise funds through contributions, and summed up by saying, "They're poor, we're poor".

The challenge posed by the cost of VET courses was raised by many participants. Comments included,

"VET is a fantastic vehicle for these kids, but the cost is prohibitive for low income families."

"We need greater VET resources, lots of kids do a more academic course than they'd like."

"VET costs are a problem, the school is a deficit school, we can't afford to subsidise the cost. VET fees are a big barrier."



It is important to note that VETiS Supplementary funding for 2009 has been increased substantially for all courses and will address some of the VETiS issues raised in school visits. It should also be noted that many of the schools in this study had implemented effective strategies and established targeted programs within their current SRP budget allocations.

There was a particular cluster of issues reported by rural schools. One major problem was lack of access to allied support staff, such as school psychologists or youth workers, and high turnover of these staff, making it difficult for students to establish ongoing relationships with them. One principal noted,

“Stable support people are really important, but we don’t have the numbers to do it, it makes it really hard. Kids build up rapport with someone and then they go, the kids give up because the relationship has been dropped.”

Rural schools (and some outer suburban schools) had difficulties transporting students to other education providers such as TAFE, and this limited the breadth of what they could offer students. Work placements for VCAL and school-based apprenticeship placements were limited by the breadth of industry available in rural towns. The very high cost of students leaving town to attend a university was also felt by some participants to limit some rural students’ aspirations.

Attracting and retaining appropriate teaching staff was a problem for both rural and metropolitan schools. This in turn placed limits on the breadth and quality of the programs schools were able to offer. Smaller schools also reported problems providing a broad curriculum, though many creative provision arrangements with other schools and providers were discussed. A number of participants mentioned the difficulty of competing with other schools for good staff, and losing staff to non-government schools offering teachers higher pay, or to government schools which sought to cater for the least challenging students. This

linked to concerns about how schools position themselves. The principal at one school noted, “...some schools will increase their profile at the expense of other schools by selecting out [certain] students. Some schools won’t run disability and integration programs, they discourage these kids from coming.”

A final important challenge identified by participants was the lack of alternative options for students below the age of 15. While these students could move into TAFE or ACE courses once they reached this age, there was a general perception that this was often “too little, too late”. A number of participants felt that alternative learning pathways with a hands-on focus needed to be developed for students in Years 7 to 10.

10. Recommendations

This study has identified successful programs and strategies that schools can use to target the needs and improve the outcomes of the students most at risk of early school leaving.

The successful interventions were identified through two key tasks. The first involved an extensive literature review to discover what national and international research identifies as the most successful initiatives to improve student engagement in school and reduce early leaving. The second was a survey of Victorian government schools on interventions or initiatives that they have found to be effective in improving outcomes for at risk students. On-site interviews were conducted with principals, senior management team members and welfare staff at 25 secondary schools across Victoria, and telephone interviews were conducted with staff at an additional 13 schools

Effective schools that were surveyed tended to be characterized by strong leadership, a clear focus on achievement, supportive and positive school culture or climate, including supportive relationships among students and teachers, good communications with parents, and targeted programs that address the needs of different groups of students from disadvantaged backgrounds. The programs, designed to raise levels of student engagement and retention, focus on improving student achievement and reducing achievement gaps, improving the quality of relationships between students and teachers, expanding alternatives, addressing welfare needs, and lifting student confidence and self-esteem.

This section presents recommendations to help support implementation of Effective Strategies across all Victorian government secondary schools. The recommendations are directed more at a system level than at individual schools. This is for two main reasons. Firstly, schools face different sorts of challenges when it comes to the needs of students at risk of early leaving. The community context and risk factors can vary substantially across schools. Small rural schools, for example, may face different challenges in terms of early school leaving than large urban schools in industrial settings. It is not feasible, therefore, to prescribe interventions for all schools without regard to a school's geographic location, size, or student population. The diversity of approaches identified in the report reflects the complexity of the causes of early school leaving and the need to tailor approaches to local circumstances.

Secondly, in Victoria, government schools operate in a governance context of relative autonomy and to a large extent are self-governing. Decision-making about programs and approaches to teaching and learning, school culture, and teachers occurs largely at the school-level. The recommendations of this study, therefore, do not attempt to prescribe what schools should do. Rather they are targeted more at a system level and what support schools will need to help implement various strategies effectively.

The main issue is how schools can be supported in their efforts to identify appropriate strategies and then to implement them, given their geographic location, size, student population and community context. The recommendations to help support schools are presented below.

Recommendations

1. Information on successful or effective strategies that work to keep students in school and support school completion needs to be communicated to schools

The interventions identified in this report need to be communicated to schools, which could occur initially through a conference and placement of the report on the Student Mapping Tool website. There is also on-going need for communication of effective strategies through professional development workshops. This is to give opportunity for staff from schools to learn about, discuss and consider the range of interventions and how they can work in their schools. The workshops should be broadened to include information on the use of the Tool. The feedback from consultations undertaken with schools in the current study indicated that while schools were aware of the Tool, some were not using it effectively yet because of a lack of training and understanding of how it should be used and applied.

It would also be valuable for the materials associated with the Tool and Effective Strategies to be placed on a dedicated website which schools could access, providing an avenue to help them share resources, ideas and tools. Ideally, this would mean development of a widely-available and valued internet website which provides program materials, support, communication and information on initiatives and the opportunity for schools with large numbers of disadvantaged students to have access to wider educational resources and a school community base with which to interact. An example of this is provided by a website established in New South Wales for Country Area Program (CAP) schools (see Lamb and Teese, 2005). It has been not only a resource for schools to share ideas and experiences, but has helped developed a sense of community among schools dealing with similar issues. An annual conference for schools on at risk students, program developments and effective practices would also help facilitate support.

2. Further work needs to be undertaken to develop a guide or manual to assist schools in how to implement appropriate strategies and how to monitor their impact

This report has focused on identifying strategies that schools can use to help improve student engagement and retention for students at risk of early leaving. There is some information on how strategies have been implemented in schools and

how they operate. However, a critical component of implementation will be information on how schools can go about developing and implementing selected strategies, as well as how they can monitor impact. There is a need for further work to be completed to develop a manual or guide for schools on successful implementation. This will need to include consideration of issues about how schools can work to establish a commitment to change as well as developing the means for change. For example, the manual would need to include how schools can work to ensure everyone understands the purpose and role of the interventions, since research shows that reforms are often poorly implemented because of a lack of understanding of the intent of the reform.

It is imperative to have good data to determine whether the intervention strategies are effective and to monitor implementation in order to facilitate modifications if needed. It is particularly important to create a series of “early indicators” that can provide feedback on the initial impacts of the strategies. For example, it may take several years for the strategies to improve completion rates, but they may have a more immediate impact on student attendance and progress (i.e. achievement). So there is a need to develop measures of these outcomes to enable schools to use them to monitor progress toward longer-term goals, and to sustain the will and commitment to the reforms.

3. Schools with large numbers of at risk students should be encouraged to work together and share resources to help meet the costs of interventions

Solutions to educational problems such as early school leaving are often tied to increased funding. Adequate financial resources are needed to provide effective programs. This is particularly acute in small schools with high concentrations of disadvantaged students who are more at risk of early leaving. In the schools visited as part of this study many of the larger schools were able to implement a variety of interventions and meet the costs within their current SRP allocations. This is harder in smaller schools. However, it is possible for such schools to consider lowering the costs of programs by sharing resources across schools. For example, it would be possible for schools to share the costs of welfare support, supplementary tutoring programs, and project-based learning by organizing and running the schemes collectively. This should be coordinated at a regional level, and LLENs could be a strategic partner in this process, given their core role of creating and developing sustainable relationships between education providers, industry and the community. It is more difficult for smaller rural schools that are isolated. However, the use of a shared resource base, such as a website, and the use of different forms of technology may help defray some of the costs of implementing and running various types of interventions.

4. To help promote stronger outcomes for students, schools should be supported and encouraged to focus on early and continuous intervention

Research has shown that the strongest student outcomes in terms of student engagement and school completion are achieved when there is early intervention and continued support. When identified and addressed early, achievement, attitudes and behaviours can often be changed. An example of this is provided by Heckman (2008) who has assessed the effectiveness of interventions in off-setting growing gaps in skill levels among students. Figures 3 and 4 show the impact of interventions provided at different stages of schooling.

Figure 3 displays the rates of returns in terms of levels of skills related to the stage of schooling at which the intervention occurs. Figure 4 displays the effects of different ratios of early compared to late investment on skill levels. Both figures show, in slightly different ways, that the earlier the point of intervention the better the returns to investment in terms of the long-term skill levels of those who participate. If interventions to raise achievement levels and address disengagement among at risk students are left until late in schooling, then the outcomes are likely to be less effective and more costly (in terms of a cost and benefit analysis) than if the intervention occurs early.

Figure 3 Returns to investment based on the point of intervention

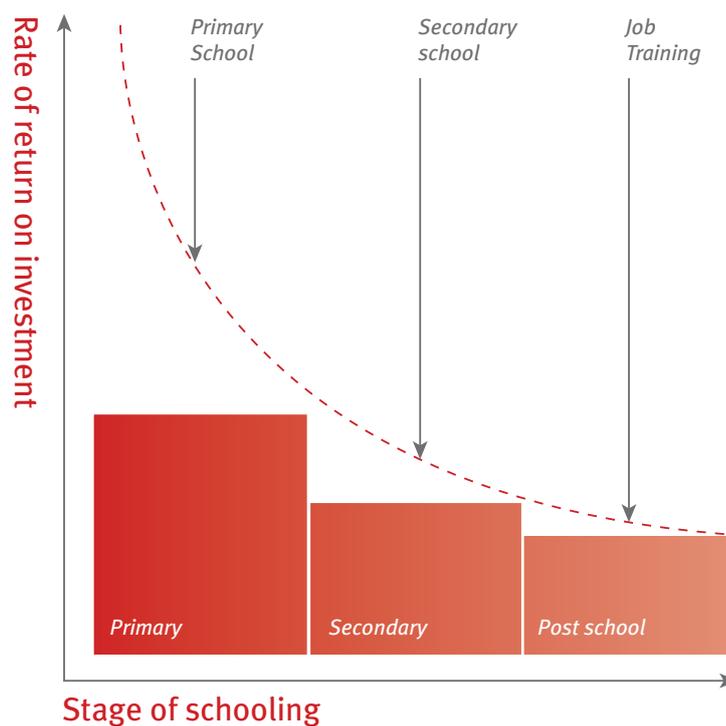
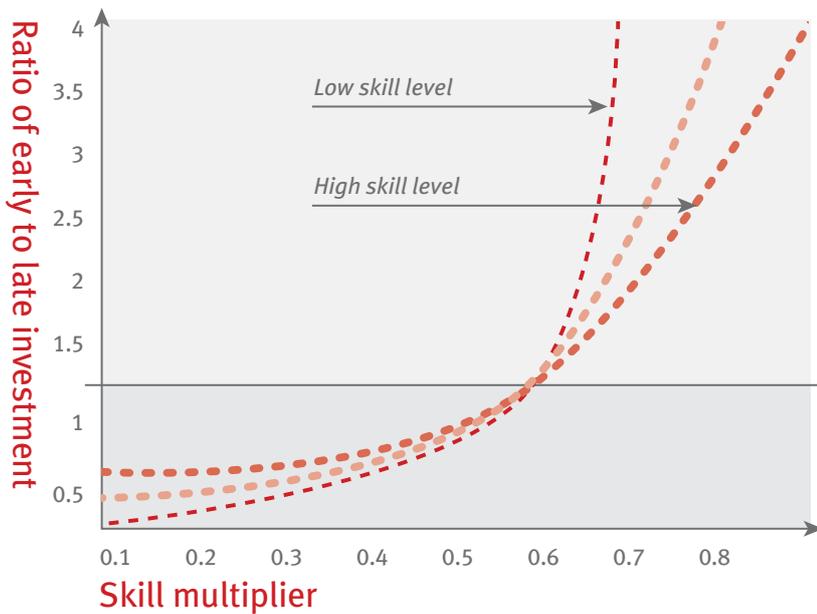


Figure 4 Impact of ratio of early to late investment on levels of skills



Schools need to be supported and encouraged to implement early interventions to address the needs of at risk students. One way to do this would be for the system to lead the way by making strategic investments in interventions at junior year levels that have proven to be both effective and cost-effective in improving completion rates.

5. Providing more extensive pathways support, such as that offered by MIPS, to at risk students in the junior secondary school years should be considered by schools

Currently, MIPS is made available in schools for all students aged 15 years and over. MIPS offers these students individual assistance to develop pathways plans. A review of the scheme reported that according to many schools MIPS had improved student engagement and staff-student relations, had increased the responsiveness of school staff to the needs of all students, and had raised completion (Asquith Group, 2005). Schools participating in the current study that were successful in raising completion rates identified the extension of MIPS to the junior years as an important part of their success. These schools began pathways planning and support much earlier than at age 15, operating the program from Year 7, particularly for students identified as being at risk of early leaving. Extending such pathways support, whether through MIPS or through other support mechanisms such as mentoring, should be considered by schools as an important means of raising retention.

6. A review should be undertaken of the current arrangements for the staffing of careers counseling and MIPS across schools with a view to ensuring that all staff are appropriately qualified or trained

According to overseas research, the most successful approaches to careers education are partly dependent on the quality of careers teachers (Morris, 2000). While a well-resourced, regularly updated and easily accessible careers centre or library is important, equally vital is the quality of careers advisors. Successful careers counseling in assisting at risk students is linked to the experience, qualifications and training of careers officers. There is some variation in the qualifications and experience of staff used for careers counseling in Victorian schools, at least according to the schools visited as part of the current study. There is a need for a review of the current arrangements for the staffing of careers counseling in schools and for the development of guidelines on the qualifications, experience and training needed for careers counselors.

7. Continued effort is needed to provide more highly integrated support to schools to help address early school leaving

Implementing effective models, programs, or strategies is not a simple procedure. Schools that want to implement interventions must consider the extent to which the programs are compatible with the goals, needs, and resources of the school where the programs are to be implemented. Even more critical to the success of the programs will be support with regard to implementation. Training, staff development, and planning time must be carefully considered. It is also critical to conduct ongoing evaluations of intervention effectiveness and make modifications as needed, as well as examinations of the factors contributing to patterns of early leaving.

The system can help schools in this process by:

- establishing systems for monitoring risk indicators associated with early school leaving,
- providing training, feedback and support for schools in their efforts to reduce early leaving,
- reviewing and revising relevant policies that affect early leaving, and
- providing schools regularly with information on post-school outcomes data from surveys such as On-Track on the reasons why young people leave school before completion.

8. Make strategic investments in proven strategies targeting the needs of the most disadvantaged students and schools

The system should make strategic investments in interventions that have proven to be both effective and cost-effective in improving student outcomes for students at risk of early leaving. One example where this can happen fairly easily is the extension of MIPS to at risk students from Year 7. MIPS has been found to help improve student engagement and staff-student relations, and to increase the responsiveness of school staff to the needs of students (Asquith Group, 2005). Some schools are already extending MIPS to at risk students below the age of 15 and are doing this in a relatively cost-effective and strategic way of providing an intervention that helps reduce rates of early leaving. These schools that are doing this are doing so within their current SRP allocations. Other strategies and programs could also be considered.

11. Implementation strategy

This section presents an outline of a strategy for implementation of the effective interventions identified in the report.

The strategy contains three elements:

1. communication,
2. implementation at a school-level, and
3. resources.

11.1 Communication strategy

Effectively communicating the findings of the Report will be the first step towards assisting Victorian secondary schools to improve student engagement and retention. The following steps are recommended in ensuring that schools are able to take advantage of the knowledge gained through this project.

1. An initial one-day conference, for principals and appropriate school leadership, careers and welfare staff should be held to present the findings on effective school interventions. The conference would present some of the central findings from the Report and outline strategies available to schools. Staff from some of the most effective schools participating in this project would be invited to present workshops at the conference, describing the means they had used to improve student engagement and retention, together with how they had overcome barriers to improvement.

2. Subsequent annual conferences focusing on improving student engagement and retention in secondary school would achieve several purposes. First, they would allow school staff to share their knowledge and experiences in working to improve student outcomes, and learn from one another. Second, conferences would allow networks between schools to be further developed, and give schools access to ideas and innovations beyond their

local geographic area. Finally, they would help schools keep abreast of subsequent cutting-edge research on student retention and engagement, and would provide a link between schools and researchers in the field.

3. The development of a website that forms part of the current Student Mapping Tool section of DEECD's website is also important. A modified version of this Report could be placed on the website, including the strategies outlined in the Report, link to some of the overseas programs identified as effective, and case studies of Victorian schools that have improved retention and engagement. The website would also need to provide spaces in which teachers and schools could share their own experiences with other schools. It is essential that, in working to improve student outcomes, schools and teachers do not feel isolated, and are able to recognize and discuss common problems, setbacks and solutions in the process. Appropriate related professional development opportunities for teachers could also form part of the site. The website could also potentially include a wide range of useful links: to consultants and regions, to local networks and LLENS, to other Federal and state government initiatives, to welfare agencies and to other appropriate non-government bodies (for example, charitable organizations that may provide scholarships or mentoring).

4. The provision of a set of regionally-based professional development

workshops following release of the Report is also recommended. Workshops would incorporate two strands: professional development on the use of the Students Mapping Tool, and professional development focusing on the strategies outlined in the Report. First, during both school interviews and focus group discussions, it became evident that, while the Students Mapping Tool was found to be useful by a number of schools, implementation across schools had been very uneven, there was a lack of awareness of the tool and its potential in some settings, and some schools had encountered technical problems in using it. Professional development to improve implementation of the Mapping Tool is essential to ensure that schools are accurately identifying those students most in need of targeted intervention. Second, professional development sessions that outline the findings of the Report and the strategies it identifies will enable schools to begin thinking about the types of strategies likely to be most important in improving retention and engagement in their particular setting. This is the first step towards schools developing a plan of action to address student needs, and would be subsequently built upon using the implementation manual discussed below.

11.2 School implementation

The identification of strategies schools can use to improve student retention and engagement is vital to improving the life outcomes of vulnerable students. Feedback from regional focus groups about the strategies outlined in this report was positive, and indicated that the strategies hold real potential for addressing student need. However, every focus group noted that schools will also need information that will enable them to move from the “what” – the strategies that are available to them – to the “how” – the effective implementation of such strategies across a broad range of school settings.

For this reason, it is essential that a manual be developed for schools enabling them to make this transition. The manual would need to include information on how schools best develop a shared commitment to and understanding of the need to increase retention and engagement, together with means of identifying which strategies might be most appropriate to the needs of their students and the characteristics of their school. Effective processes for implementation would need to be outlined, together with the types of human, financial and infrastructure resources a school is likely to need for each strategy.

Templates for the development of an implementation plan would also be a useful inclusion, as would be further information from some of the schools involved in the project on their own particular paths to effective intervention. Links to the website mentioned above, and to other planning and implementation resources, including DEECD regional personnel, could also form part of the manual. Information on processes and practices would need to be developed in consultation with the schools participating in this project, drawing on the knowledge they have gained about effectively tackling issues of engagement and retention.

The manual would also need to outline for schools means of evaluating the effectiveness of the strategies following implementation. Such means would include measures currently available to schools (such as attendance rates), but may also include more specific measures targeting particular groups of students, or particular outcomes. Schools would need to use these measures to modify programs where appropriate, or to identify further strategies to target new issues arising in the school.

11.3 Resources

Schools, particularly smaller schools, may need additional resources to support implementation of some of the Effective Strategies. Regional offices should play a key role in coordinating and organizing shared resources for interventions across schools. Additional funds may be needed to facilitate this.

Additional funding support should be provided to make strategic investments in interventions that have proven to be both effective and cost-effective in improving student outcomes for students at risk of early leaving. The system needs to take the lead in sponsoring the implementation of programs that it knows will work. One example is the extension of MIPS to at risk students in the junior secondary school years. Additional funds could be distributed according to numbers of at risk students, assessed through the current Student Family Occupation (SFO) weights. Another example is targeted assistance for skill development among low achievers. Funding could be provided for Year 7 and Year 8 students who are identified as low achievers and at risk of disengagement. This approach also incorporates the goal of early intervention.



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Appendix

Table 1A Initiatives to improve the outcomes for students at risk of early leaving: school-wide initiatives¹

Intervention	Examples	What the research says and comments
Separate mini-schools within the one school site (“school within a school”)	<i>Career Academies</i> (U.S.) <i>Talent Development Middle Schools/Talent Development High Schools</i> (U.S.) <i>School Transitional Environmental Program</i> (STEP)	Kerr and Legters (2004) found that Maryland schools using mini-schools have lower dropout rates, when controlling for other factors such as student cohort characteristics.
Longer lesson times	<i>Talent Development Middle Schools/Talent Development High Schools</i>	TDHS show some success in increasing student progress in school with positive impact on maths achievement and attendance (Herlihy & Kemple, 2004).
Smaller groups of teachers responsible for teaching and pastoral	<i>Talent Development Middle Schools/Talent Development High Schools</i> <i>School Transitional Environmental Program</i> (STEP)	TDHS show some success in increasing student progress in school with positive impact on maths achievement and attendance (Herlihy & Kemple, 2004).
Strategic teacher placement	Quality staff at all levels of school	Victorian research suggests that secondary schools which place their most experienced teachers in the early as well as the later years tend to increase student achievement and retention (Lamb, 2007). Similar results were reported in the US (Neild and Farley-Ripple, 2008).
Lower student:teacher ratios, smaller class sizes	<i>Student Teacher Achievement Ratio (STAR)</i> project, Tennessee <i>Project C.O.F.F.E.E.</i>	Finn et al. (2005) find students in smaller classes more likely to graduate, although the program was implemented at primary school and effects were seen in secondary. Pritchard (1999) found that smaller class sizes can contribute to better relationships between teachers and students, better quality instruction and improved outcomes if teachers adjust their teaching styles.
Provision of vocational education and training, including structured workplace learning.	<i>Career Academies</i> (U.S.) <i>Specialist High Skills Major</i> , Ontario <i>Secondary Tertiary Alignment Resource (STAR)</i> , New Zealand <i>Learning To Work</i> (New York) VET, VCAL <i>Project C.O.F.F.E.E.</i>	Bishop and Mane’s (2004) analysis of international data shows that offering VET at secondary level tends to increase student retention. Plank et al. (2005) find that the addition of career and technical education courses appears to reduce the risk of dropping out, but only for students who are the same age as their cohort. Where a student is older (likely to have repeated) there are no effects. James et al. (2001) find potential early school leavers were positive about vocational programs with workplace component.
Programs to improve students’ general work or social skills	<i>Achievement for Latinos through Academic Success (ALAS)</i> <i>Twelve Together</i> <i>Teen Outreach program</i> <i>Career Academies</i>	Gandara et al. (1998) find ALAS impacts positively on retention. Dynarski et al (1998) find Twelve Together reduces dropout. Eccles and Templeton (2002) cite evidence that Teen Outreach programs reduce suspension and increase achievement. Career Academies improve retention and increase academic progress (WWC, 2007).
Community service programs	<i>Teen Outreach Program</i> <i>Quantum Opportunities Program</i>	Eccles and Templeton (2002) cite evidence that Teen Outreach programs reduce suspension and increase achievement, while the Quantum Opportunities Program reduces dropout.

¹ The focus of the initiatives outlined is prevention – holding students in schools, rather than “rescuing” those who have already dropped out. In practice the boundary between the two types of programs may be blurred.

Intervention	Examples	What the research says and comments
Co-curricular programs	Homework clubs, centres and support Extended service schools, UK Breakfast clubs Peer tutoring Extra-curricular programs After-school and summer programs	<p>Pocklington (1998) evaluated a 2-year study of school improvement with a range of revision classes, coursework clinics and homework centres and found higher achievement and engagement for participants.</p> <p>Students who participate in extra-curricular activities both inside and outside school have lower odds of dropping out (Finn, 1989; Rumberger, 1995)</p> <p>Some schools provide targeted programs that are often run as extra-curricular activities. Students may take part in peer tutoring, mentor programs or programs aimed at improving self confidence (Artelt et al., 2003). These show evidence of helping to reduce early leaving.</p> <p>A review of 35 studies of supplementary programs for assisting at risk students in reading and mathematics found small positive effects on student achievement and larger effects for targeted programs such as tutoring in reading (Lauer et al., 2006).</p>
Teacher professional development to improve teaching and learning	Targeted professional development: Relationships with students Classroom management skills Literacy and numeracy <i>First Things First, U.S.</i>	<p>Wenglinsky (2000) found that certain types of professional development may have an impact on student achievement. Students whose teachers received professional development in working with diverse student populations are ahead of their peers in maths. Students whose teachers receive professional development in higher-order thinking skills gain over students whose teachers lack such training in mathematics.</p> <p>First Things First is a whole-school reform initiative designed to increase achievement and engagement in secondary schools. There is a strong professional development component for teachers. There is evidence of increasing school completion rates (Quint et al, 2005, cited in Belfield and Levin, 2007).</p>
Coordination with other providers, including cross-sectoral initiatives	<i>Student Success Lighthouse Projects</i> in Ontario <i>Learning to Work</i> , New York <i>Targeted Youth Support Pathfinders</i> (UK)	<p>Some of the Student Success Lighthouse Projects made links with universities and offered some courses on campus to motivate students to continue to university, and to familiarise them with the environment. Dual credits are given – students earn a credit towards their high school diploma, and a college credit.</p> <p>Learning to Work is offered within GED programs, transfer high schools and Young Adult Borough Centers. It is a combination of career planning, job and internship placements, tutoring, counselling and support, and attendance monitoring.</p> <p>Targeted Youth Support Pathfinders (TYSP) is a multi-agency approach to youth support involving a range of education and welfare staff, including school nurses, housing officers, police youth workers, drugs workers, the Youth Service, Connexions, Behaviour Support Worker; teenage Pregnancy Worker; etc.</p> <p>The target group is youth aged 10 to 19.</p> <p>There are three different models:</p> <p>Multi-agency panel (members remain within their agencies but meet regularly)</p> <p>Multi-agency team (members are seconded or recruited into the team with a common purpose and a leader)</p> <p>Integrated service (different services are co-located to form a highly visible hub in the community)</p>

Table 1A Continued

Intervention	Examples	What the research says and comments
Coordination with other providers, including cross-sectoral initiatives	<i>Connexions</i> (UK)	<p>Connexions is a government service providing advice and support to youth aged 13-19 in Britain. It includes a website, access to personal advisers (PAs), and partnerships with local authorities, health authorities, the police, the probations service, employers, the voluntary sector and young people.</p> <p>Each school negotiates with their Partnership to determine reporting arrangements and the PA skills needed for their cohort.</p>
Pathways planning and careers education	<i>Managed Individual Pathways</i>	<p>Pathways planning is organised in Victorian schools through the Managed Individual Pathways (MIPS) scheme which offers all students aged 15 and over individual assistance to develop pathways plans in Years 10, 11 and 12. A review of the scheme found that many schools reported that MIPS had improved student engagement, staff student relations, increased the responsiveness of school staff to the needs of all students, and raised completion (Asquith Group, 2005). The effects varied across schools depending on the way the program was implemented.</p>
	Careers education	<p>A study in the United Kingdom, found that the most successful approaches to careers education are in schools where responsibility for delivering and monitoring the quality of provision is clearly identified, and where senior management and guidance staff co-operate closely to ensure that the various elements of careers education are effectively coordinated (Morris, 2000). The study also indicates that pupils respond best where they have experienced careers education as part of their normal curriculum. It also points to the quality of careers teachers as fundamental to success.</p>
Attendance programs	Birmingham Education Services (Birmingham City Council, UK)	<p>Has a cluster of student support teams working with schools to support attendance:</p> <ul style="list-style-type: none"> • The Pupil Watch Team: targeted contact with children non-attending school. • The Pupil Connect Team: works to identify, track and reconnect those children with education. • Education Department ITTeam: supports schools in implementing ICT systems for recording and tracking student attendance.
	<i>Project Respect</i> (U.S.)	<p>Uses caseworkers known as Community Advocates, who check with families on repeated absences, and may help them solve problems that are influencing students' attendance.</p>
	<i>Check and Connect</i>	<p>Check and Connect has a strong educational focus – keeping the child in school and keeping education central. The focus is on monitoring student attendance. However, the program also incorporates problem-solving skills and mentors work to improve school-family relationships.</p>

Table 1B Initiatives to improve the outcomes for students at risk of early leaving: student-focused initiatives

Intervention	Examples	What the research says and comments
Mentoring/case management	<p><i>MIPS</i> <i>I have a dream</i> (U.S.) <i>Big Brother/Big Sister program</i> (U.S.) <i>Sponsor a Scholar</i> (Philadelphia) <i>Quantum Opportunity Program</i> (U.S.) <i>Check and Connect</i> <i>Twelve Together</i> (U.S.) <i>Helping one student to succeed (HOSTS)</i> <i>Cross Phase Mentors</i> (Manchester, UK) <i>Project C.O.F.F.E.E</i></p>	<p>Tierney, Grossman and Resch (1995, cited in Cunha and Heckman, 2006) use random assignment and find the <i>Big Brothers, Big Sisters</i> program produces positive effects on attendance and learning.</p> <p>Johnson (1996) used matched samples to find increases in college attendance and achievement for <i>Sponsor a Scholar</i> (cited in Cunha and Heckman, 2006).</p> <p>Eccles and Templeton (2002) cite evidence that the Quantum Opportunities Program reduced dropout. <i>Check and Connect</i> has a strong educational focus – keeping the child in school and keeping education central. The focus is on monitoring student levels of engagement (e.g. absenteeism). However, the program also incorporates problem-solving skills and monitors work to improve school-family relationships.</p> <p><i>Twelve Together</i> used after-school discussion groups led by a trained adult volunteer, each with 12 students, some seen as high-risk. Research found modest effects in keeping students in school, but not on school progress (WWC, 2007).</p> <p>This program focuses on ensuring a smooth transition to secondary school for the most disadvantaged primary students in Manchester. It involves 3 high schools and 13 primary schools. Mentors ensure all former Year 6 pupils begin attending on the first day of term and follow up any that fail to do so.</p> <p>They bring them to the school if necessary. With Year 6 pupils, the mentors support their learning in and out of school hours and work to remove barriers to achievement and attendance until after the SATs. They also work with primary school families in a one-on-one basis to help them make informed choices for high school places. Evaluations have been positive, but there has been no empirical research to assess impact on later student engagement and retention.</p>
Buddy systems, including cross-age tutoring	<p><i>Valued Youth Programs</i></p>	<p>In the VYP program secondary students at risk of dropping out serve as tutors of primary students who have also been identified as being in at risk situations. While students are tutors in the program, they participate in a special tutoring class that serves to improve their basic academic and tutoring skills. Each student works with three primary students at one time for a minimum of four hours each week. The student tutors are paid a minimum-wage stipend for their work and attend functions held to honor and recognize them as role models to the younger students.</p> <p>There is some evidence in quasi-experimental studies for increased retention (Eccles and Templeton, 2002)</p>

Table 1B Continued

Intervention	Examples	What the research says and comments
Family interventions	<i>ALAS (Achievement for Latinos through Academic Success)</i>	<p>In the ALAS program, parents received training on accessing community resources, as well as training on how to support behavioural changes, how to assess adolescent engagement in school, how and when to participate in school activities, how to review report cards and school credits, and how and when to contact teachers and administrators.</p> <p>Parents also received information on a broad range of community resources, such as psychiatric and mental health services, alcohol and drug counselling, social services, child protective services, parenting classes, gang intervention projects, recreation and sports programs, probation, and work programs. (Note: the ALAS program had a number of other aspects in addition to these). ALAS has been found to improve retention (Belfield and Levin, 2007; WWC, 2007).</p>
	<i>Extended Service Schools in East Riding (UK)</i>	<p>Extended Service (ES) Managers were appointed across the local authority (LA). They provide home-school liaison, parenting support and improved family learning support.</p>
Pathways planning and careers education	<i>MIPS in the early years (Years 7 and 8) for at risk students</i>	<p>Careers and pathways planning are important elements in helping keep students engaged (Morris, 2000). Effective careers education with early pathways planning for at risk students can help students plan and help identify areas that require assistance or focus. Successful careers counselling in assisting at risk students is linked to the experience, qualifications and training of careers staff (Morris, 2000).</p>
Individual or group skills training (remediation)	<p>Regular timetabled literacy and numeracy classes in Years 7 and 8) or even across the whole school.</p> <p>Continuous monitoring of skills.</p> <p>Intensive subject-specific coursework training include additional time</p>	<p>The research suggests that the earlier such programs are implemented the greater the success (Dickinson & Neuman, 2006; Field et al., 2007).</p>
	<i>Transition to Advanced Maths program</i>	<p>One example is the Transition to Advanced Maths program in the United States which is designed for students who have fallen well behind in maths (Center for Social Organisation of Schools, 2008). Students undertake a year-long “double dose” of instruction in mathematics which is designed to prepare students for a more advanced sequence of high school mathematics.</p>
	<i>Helping One Student To Succeed (HOSTS)</i>	<p>Helping One Student To Succeed (HOSTS) is a model that helps schools create tutoring programs for at risk students using a mentoring approach. HOSTS schools provide one-to-one, usually after-school tutorial services to at risk students in elementary through high school who are performing below the 30th percentile (Fashola et al., 1997).</p>
	<i>The Athena EiCAZ Intervention Programme (Birmingham, UK)</i>	<p>The Athena Intervention program is a pupil intervention program which works to raise attainment in literacy and numeracy in late primary school. Participants are identified through analysis of QCA tests, learning style tests and self esteem findings at the end of year 5. Children then attend literacy and numeracy sessions at the ATHENA Learning Resource Centre up until their SATS in the summer term. The program makes heavy use of ICT and aims to cater for individual learning styles.</p>

Intervention	Examples	What the research says and comments
Programs for teen parents	<i>Young Mothers' Program</i> , Plumpton High, N.S.W.	With the Young Mothers' Program, low-cost child care is provided, students are allowed to start school later in the day, work is delivered to them at home if necessary. Counselling is provided.
	<i>Learning, Earning and Parenting (LEAP)</i> program, Ohio	No formal evaluation, but around 40 students have completed HSC through the program. LEAP participants were found to be more likely to complete high school.
	<i>Teenage Parent Demonstration (TPD)</i>	More positive impact for those still in school enrolling in LEAP and TPD than for those who had already dropped out.
	<i>Graduation, Reality and Dual Skills (GRADS)</i> , Washington	GRADS is a multi-faceted program focusing on positive self esteem, pregnancy, parenting, academic achievement, economic independence and school completion. The program provides home and community outreach and an on-site childcare program. No empirical research, but relatively high numbers complete school or a GED. This uses a case worker approach to connecting teen mothers back into education and training.
	Reintegration Officer for Pregnant Schoolgirls and Schoolgirl Mothers (Birmingham City Council Education Service, UK)	It should be noted that pregnancy as a reason for leaving school appears to be considerably less common in Australia than in the U.S., which has a greater proportion of teen mothers, especially among ethnic minorities (cf. Lamb et al., 2004 and Rumberger, 2004a).
Creativity programs	<i>Creative Partnerships</i> , U.K.	There is qualitative research indicating the program serves to increase student engagement and satisfaction. There is also quantitative study by the National Foundation for Educational Research (NFER) which reported that compared with similar young people in the same schools, those who participated in Creative Partnerships activities performed slightly better at each of the key stages of learning and assessment (Eames et al., 2006).
Project-based learning	Project-based learning programs for disengaged students <i>Hands On Learning</i> <i>Schools Community Water Resources Project</i>	Middle years research has found the need to provide students with more authentic, cross-disciplinary learning tasks that require higher level cognitive skills (see, for example, findings from the Victorian MYRAD project, 2002).
Welfare coordination	<i>Achievement for Latinos through Academic Success (ALAS)</i> Some mentoring and case management programs also provide coordinated welfare services.	Through its community component, the ALAS program provided a bridge between students and community services including mental health, social services, drug and alcohol treatment programs, job training, and sports and recreation programs. The ALAS program has been found to impact positively on retention and achievement (WWC, 2007; Belfield and Levin, 2007).
Financial assistance for disadvantaged students	The Smith Family's <i>Learning For Life. I Have a Dream</i> (U.S.) <i>Teenage Parent Demonstration (TPD)</i> <i>Western Chances</i> scholarships, Melbourne <i>Learning, Earning, and Parenting</i> program (LEAP), Ohio. Financial incentives for teen parents to stay in school.	Costs may include funds for course materials and course fees. The commitment to provide all or part of the cost of university fees may provide some poorer students with the incentive to continue their studies. Some sponsorship programs also provide mentoring (Smith Family, 2000). Research evidence shows some potentially small effects of payments to teen parents on retaining students in school, but no effects on school completion.

Table 2A **Some sample programs for which there is documented empirical evidence of success**

<p>ALAS (Achievement for Latinos through Academic Success):</p> <p>In the ALAS program (1990-1995) student attendance was monitored on a period-by-period basis every day, and parents were contacted daily about truancy or skipped classes. ALAS counsellors communicated a personal interest that students attend regularly, taking the initiative to help families overcome obstacles that stood in the way, and expecting students to make up missed time. They also helped teachers establish a system of regular feedback to parents and students about behaviour, class work and homework on a monthly, weekly or even daily basis as needed.</p> <p>Students received ten weeks of instruction in a ten-step problem-solving strategy created by one of ALAS’s developers, along with two years of follow-up coaching. During those sessions, counsellors discussed teachers’ feedback and coached students in how to use the strategy to think through problems related to attendance, behaviour and academic progress. They also followed up with teachers to keep them informed about how students and parents had decided to address problems.</p> <p>In addition, counsellors provided parents with direct instruction and modelling on how to participate in their child’s schooling and manage adolescent behaviour, as well as helping them to connect with a wide range of community programs and social services. And they provided students with frequent positive reinforcements and group bonding activities, striving to help them feel more connected to school by showing them that caring adults were taking an interest in them.</p>
<p>Career Academies:</p> <p>Typically serving between 150 and 200 students from grades 9 or 10 through grade 12, Career Academies have three distinguishing features: (1) they are organized as small learning communities to create a more supportive, personalized learning environment; (2) they combine academic and career and technical curricula around a career theme to enrich teaching and learning; and (3) they establish partnerships with local employers to provide career awareness and work-based learning opportunities for students. They aim to prepare students for both vocational and academic/university pathways.</p> <p>A major evaluation using random allocation to the program found that the program increased career earnings of young men (but not young women) in the Academies following transition to the workforce, and increased hours worked. High school completion rates and post-secondary enrolment rates were higher for students from the Academies. However, educational attainment did not increase. Benefits were concentrated in the high-risk and medium-risk students.</p>
<p>Check and Connect:</p> <p>Check & Connect is a highly targeted, individualized intervention focused primarily on boosting students’ engagement in school. The program’s design was heavily influenced by early proponents of the theory that dropping out is a long-term process of educational withdrawal preceded by observable, “alterable” warning signs of academic difficulty and disengagement.</p> <p>Each student is assigned a monitor who acts as a cross between a case manager, mentor, problem solver, coach, and advocate. The position was modeled after the factor most commonly identified by research on resilient children—the presence of a caring, concerned adult. Monitors agree to work flexible hours so they can be “on call” outside of the normal workday all twelve months of the year, and they are employed by the district rather than by a specific school so they can stick with students who transfer. According to the program’s developers, continuity is key.</p> <p>The monitor’s primary goal is to promote regular school participation and to keep education the salient issue. The monitor’s message is that a caring adult wants the student to learn, do the work, attend class regularly, be on time, express frustration constructively, stay in school and succeed. Maintaining a focus on students’ educational progress also serves to keep interventions tightly focused on those factors most amenable to change.</p>

Talent Development High Schools/Talent Development Middle Schools:

The Talent Development model was designed to improve achievement and graduation rates in high-poverty urban high schools where many students enter ninth grade one or more years behind grade level in math and reading. Talent Development reorganizes schools into several small learning communities to create a more supportive learning environment with better relationships among teachers and students. Year 9 is restructured as a self-contained school-within-a-school called the Success Academy, where groups of students share the same teachers in interdisciplinary teams. After Year 9, students can choose from among several differently-themed Career Academies that blend career and technical coursework with a rigorous academic curriculum.

The model also incorporates intensive academic supports. During the first semester, Year 9 students take three courses designed to enable them to overcome poor preparation and succeed academically—Strategic Reading, Transition to Advanced Mathematics (TAM), and a Freshman Seminar that develops personal and educational survival skills. Unlike traditional “remedial” classes, Strategic Reading and TAM use specially developed curricula designed to accelerate learning and enable students to “catch up” academically. Year 9 students then take regular academic courses during the second semester.

In order to get students caught up and on track in one year, Talent Development uses block scheduling to double the amount of time year 9 students spend in maths and English. Ninety-minute maths and reading classes during the first semester allow teachers to fit in a full year’s worth of catch-up instruction, and “double-dosing” on algebra and English during the second semester allows students to complete a full year’s worth of credit-bearing coursework. To prevent students from becoming bored in ninety-minute classes, Talent Development developed curricula that incorporate highly motivational materials and activities designed to appeal to teenagers.

First Things First

First Things First is a framework for whole-school reform that aims to help students at all academic levels gain the skills to succeed in post-secondary education. The program places an emphasis on strengthening relationships between students and adults, improving student engagement, and improving the alignment and rigor of teaching and learning in every classroom. The program features:

- Small learning communities in which about 200-325 students remain together for 4 years and take core classes with the same group of 10-15 teachers. These teachers have planning time to discuss individual students, plan group activities and undertake instructional improvement efforts. Each small learning community is centred on a theme such as performing arts, law and government or business and technology. These themes are intended to infuse instruction in the core subjects and guide elective courses of study within the small learning community.
- A family advocate system pairs each student with a teacher advocate who monitors that student’s progress, advises the student when there are problems and celebrates the student’s achievements. Guidelines call for the advocate to meet weekly with each student and at least twice a year with the student’s family. Most teachers and administrators in a school are family advocates.
- Professional development is provided for staff members to improve their instructional capabilities, focusing on actively engaging students in meaningful and rigorous work that is aligned with state standards.

Project COFFEE

Project COFFEE (Co-Operative Federation For Educational Experience) was created with the purpose of meeting the academic, occupational, social, emotional, and employability needs of high school students considered at risk. It integrates academic and vocational instruction to increase the likelihood that participants will complete school and obtain employment. It does this by offering individualized instruction organized through a half day of academic coursework and a half day in occupational instruction. The program includes five main components: academic, life-coping skills, occupational, guidance and counseling, and physical education. These five components are integrated with the help of numerous individuals such as teachers, counselors, administrators, and employers. There is a low teacher-to-student ratio of no more than ten students in each class with an emphasis on the occupational skills component, individualized instruction in basic skills, and a focus on completion of the senior school qualification.

The program is intended for use with students who have been identified as at risk and was originally created to serve students with severe emotional/behavioral disabilities. Students participating in the program are often organized into a separate mini-school within a larger school setting, with their own dedicated teachers and staff. It is more suited to larger schools.

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